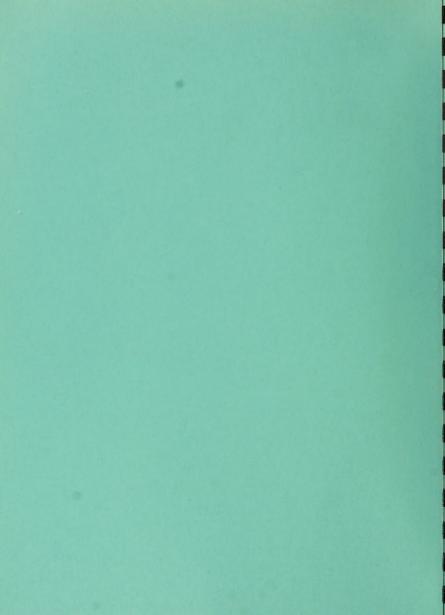
ACIDIC PRECIPITATION IN ONTARIO
STUDY - ANNUAL STATISTICS OF
CONCENTRATION CUMULATIVE
AMBIENT AIR MONITORING
NETWORK, 1991
ARB-050-93

MARCH 1994



Ministry of Environment and Energy



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1991

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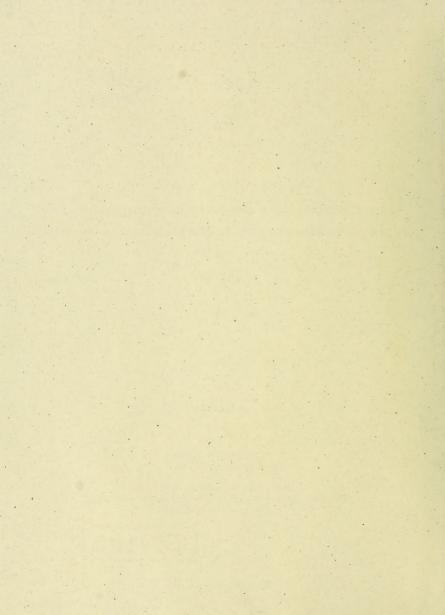
MARCH 1994



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ACKNOWLEDGEMENTS

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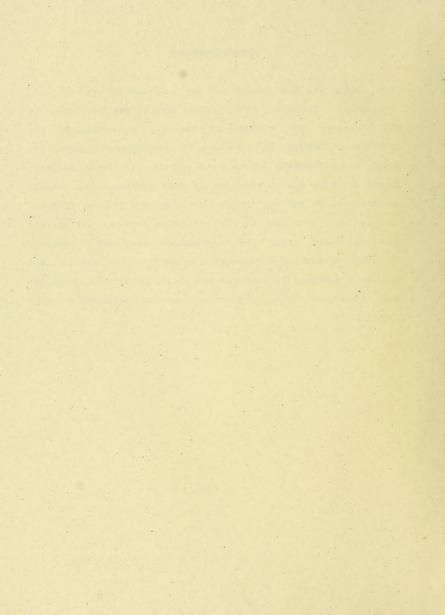


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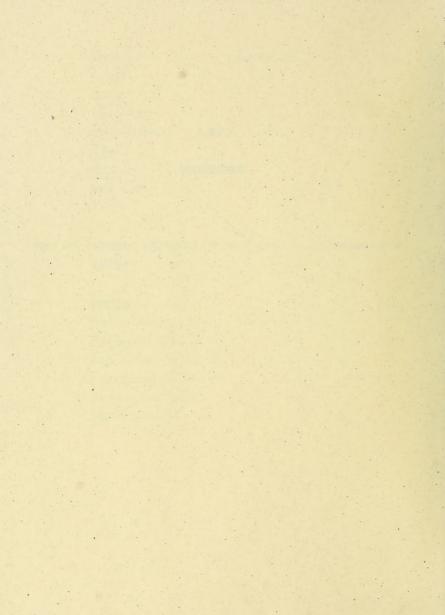
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PART I

INTRODUCTION



INTRODUCTION

The statistical summaries presented in this report pertain to the 1991 analytical results obtained from the Acidic Precipitation in Ontario Study (APIOS) cumulative ambient air monitoring network. The relevant data can be obtained on request from the Air Resources Branch of The Ministry of Environment and Energy. Any sample of which sampling period is less than 23 days or greater than 33 days is not included in the statistics calculations. All available data are utilized in the calculations except results reported as being unreliable (i.e., results are identified as unreasonable values by using the validation procedures; detailed description of the validation procedures is available from the Ministry upon request) or approximate (i.e., inexact results are reported due to laboratory difficulties, such as may be encountered in calibration, or when the sample cannot be re-analyzed to confirm the reported value). In a very few cases, concentration levels exceeded the upper limit of the range of the chemical analysis. Rather than using the upper limit, a decision was made to exclude these values from the statistics generated in this report. Reported results for metals which have missing leachate analysis are also excluded from statistical analysis. Results labelled as <W are replaced by "zero". W is the level which the analytical technique cannot distinguish from zero. Prior to 1986, if a level was recorded less than the detection limit T, a value corresponding to one half the detection limit was utilized for statistical calculations as

reported in the statistical summaries. These values are no longer halved. Note that T is normally about ten times W, and values above the T criteria are considered to be precise and accurate. W corresponds to approximately one standard deviation of low level duplicate of real samples. In the presented statistics summaries, "Total Sulphur" is calculated by the summation of sulphur of Sulphur Dioxide" and "Sulphate".

Beginning in 1985, "Sulphur Dioxide" is corrected by the addition of nylon filter sulfate. In these reports sulphur loading on nylon filters is interpreted as sulphur dioxide. However, it is possible that organic sulphur compounds also contribute to this loading. Methods do not currently exist to quantify this contribution in routine network operation.

The statistical summaries presented in Parts III to IV include number of samples, mean (arithmetic/geometric), standard deviation, maximum, minimum, quartiles. These statistics are for an average sampling period.

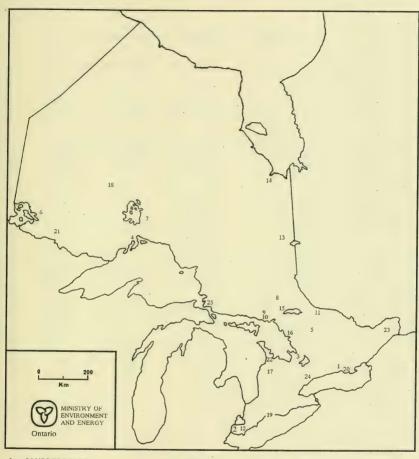
Whatman 40 Blank Filters

The occurrence of non-zero blank values for the Whatman 40 filters used in the cumulative network should be borne in mind when interpreting data from this method.

PART II

STATION LOCATION





- 1. CAMPBELLFORD 2. COLCHESTER
- 3. COLDWATER
- 4. DORION
- 5. DORSET
- 6. E.L.A. 7. GERALDTON
- 8. GOWGANDA
- 9. HANMER-2

- 10. KILLARNEY
- 11. MATTAWA
- 12. MERLIN
- 13. MOONBEAM
- 14. MOOSONEE
- 15. MCFARLANE LAKE
- 16. MCKELLAR
- 17. PALMERSTON
- 18. PICKLE LAKE

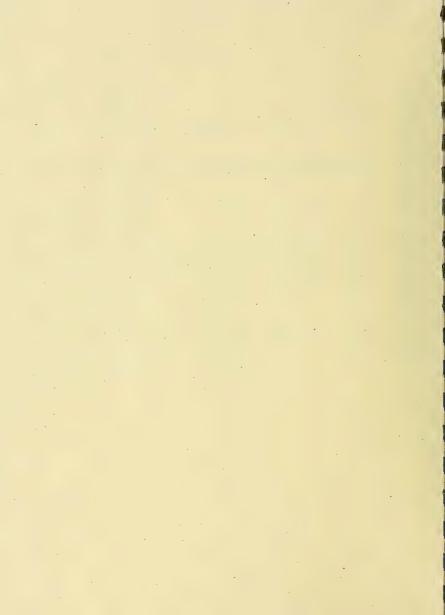
- 19. PORT STANLEY
- 20. PT.PETRE 21. QUETICO CENTRE
- 22. SHALLOW LAKE
- 23. SMITHS FALLS
- 24. TORONTO ISLAND 25. TURKEY LAKES

APIOS CUMULATIVE AMBIENT AIR NETWORK SITES

MOE REGION	STATION NAME	LATITUDE	LONGITUDE	NORTHING	EASTING
Southwestern	Colchester	41°59'15"	82°55'41"	4650000	340300
	Merlin	42°14'47"	82°13'30"	4676400	398950
	Palmerston	43°48'19"	80°54'12"	4850050	507750
	Port Stanley	42°40'22"	81°09'55"	4724050	486700
	Shallow Lake	44°34'54"	81°05'24"	4936200	492850
Central	Campbellford	44°27′28"	77°47′33"	4907600	277150
	Coldwater	44°37′31"	79°32′08"	4942200	615900
	Dorset	45°13′26"	78°55′52"	5009650	662400
	Toronto Island	43°39′15"	79°23′14"	4834511	630056
Southeastern	Pt. Petre	43°50′20"	77°09′10"	4856015	326929
	Smiths Falls	44°56′41"	75°57′48"	4977100	423950
Northeastern	Gowganda	47°39'04"	80°46'32"	5277300	516600
	Hammer-2	46°39'45"	80°56'37"	5167443	504314
	Killarney	45°59'26"	81°29'18"	5092900	462200
	Mattawa	46°16'45"	78°49'19"	5127150	667800
	McFarlane Lake	46°25'57"	81°57'03"	5142323	426948
	McKellar	45°30'57"	.79°55'19"	5040600	583950
	Moonbeam	49°19'16"	82°08'46"	5463600	416650
	Turkey Lakes	47°03'15"	84°24'00"	5214250	696750
Northwestern	Dorion	48°50′33"	88°36'45"	5228750	569500
	E.L.A.	49°39′22"	93°43'28"	5500950	447350
	Geraldton	49°48′05"	86°46'00"	5516300	516750
	Pickle Lake	51°02′41"	90°12'04"	5658307	696198
	Quetico Centre	48°24′44"	91°12'08"	5363461	633035
Out of Prov.	Wolf Ridge	47°23′00"	91°12′25"	5249100	635375

PART III

SUMMARY STATISTICS OF OBSERVED CONCENTRATION BY STATION



ONTARIO MINISTRY OF ENVIRONMENT & ENERGY APIOS -- ACIDIC PRECIPITATION IN ONTARIO STUDY 1991 SUMMARY STATISTICS OF CONCENTRATION

STATION: COLCHESTER LOVOL SITE NO.1

	SODIUM UG/M3	0.3390 0.1776 0.2777 0.0719 0.2679 0.1176 0.3390	VANADIUM UG/M3	000000000000000000000000000000000000000		
	POTASSIUM .UG/M3	0.0526 0.0369 0.0456 0.0456 0.0456 0.0526	NICKEL UG/M3	000000000000000000000000000000000000000		
	CHLORIDE UG/M3	0.828 0.456 0.703 0.175 0.678 0.826 0.826	COPPER UG/M3	0.00000 0.00000 0.00000 0.00000 0.00000	TOTAL NITRATE UG/M3	100.20 100.20 100.20 100.20 100.20 100.20
	CALCIUM UG/M3	0.469 0.324 0.336 0.101 0.321 0.324 0.469	MANGANESE UG/M3	0.0041 0.0038 0.0038 0.0039 0.0039 0.0039 0.0041	TOTAL SULFUR UG/M3	8 4 6 6 7 8 8 7 7 7 8 8 7 9 8 9 9 9 9 9 9 9 9 9
	NITRATE UG/M3	3 1.058 0.657 0.824 0.171 0.807 0.757 1.058	LEAD UG/M3	0.0112 0.0080 0.0080 0.0095 0.0095 0.0096 0.0096	SULFATE NYL UG/M3	1,1082 0,8189 0,9345 0,1251 0,9265 0,8189 0,8189
	NITRIC UG/M3	3 0.4338 0.2860 0.2860 0.2564 0.2550 0.2590 0.2590	MAGNESIUM UG/M3	0.1019 0.0551 0.0193 0.0193 0.0778 0.0551 0.0841	ARSENIC SI UG/M3	00000000000000000000000000000000000000
NO. I	SULFATE UG/M3	3 417 2 198 2 198 2 188 0 510 2 183 3 046 3 417	ALUMINIUM UG/M3	0.0302 0.0302 0.0224 0.0258 0.0258 0.0258 0.0258	CADMIUM UG/M3	0.00039 0.00017 0.00028 0.00026 0.00026 0.00017 0.00027
COLCHESTER LOVOL SITE NO.	SULFUR.DIOX UG/M3	14,157 6,636 11,322 3,337 10,736 6,636 13,172 14,157	IRON UG/M3	0.0539 0.0310 0.0310 0.00411 0.0411 0.0415 0.0539	ZINC UG/M3	0.0223 0.0147 0.0192 0.0193 0.0189 0.0147 0.0223
STATION: COLCHESTE		# OF SAMPLES MAXIMOM MAXIMOM ARTH. WRAN ARTHSTD. DEV. GEOW. WEAN IST OUARTILE 31D OUARTILE MISSING VALUES		# OF SAMPLES MAXIMOM AAITH. WEAN ARITH. STD. DEV. GEOW. WEAN IST OUARTILE 32D QUARTILE 33D QUARTILE MISSING VALUES		# OF SAMPLES MAXIMOM AATTH. WEAN AATTH. STD. DEV. GEGOW. WEAN IST QUARTILE ZAD QUARTILE ZAD QUARTILE MISSING VALUES

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	SODIUM UG/M3	13 0.4170 0.1069 0.1069 0.1626 0.1626 0.1183 0.1367 0.1986	VANADIUM UG/M3	0.0022 0.0008 0.00012 0.00012 0.0012 0.0012 0.0013		
	POTASSIUM UG/M3	0.1020 0.1020 0.05380 0.0160 0.0579 0.0671 0.0617	NICKEL UG/M3	13 0.0000 0.0001 0.0001 0.0000 0.0000 0.0000		
	CHLORIDE UG/M3	0.915 0.328 0.526 0.174 0.481 0.463	COPPER UG/M3	0.0029 0.0029 0.0019 0.0017 0.0017 0.0019	TOTAL NITRATE UG/M3	10 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
	CALCIUM UG/M3	13 0.101 0.101 0.279 0.279 0.599 0.599	MANGANESE UG/M3	0.0090 0.0093 0.0018 0.0018 0.0056 0.0055	TOTAL SULFUR UG/M3	10.93 3.31 6.04 6.04 11.97 5.74 5.83 6.22 0
	NITRATE UG/M3	13 0.630 0.133 0.132 0.922 0.926 0.966 1.028	LEAD UG/M3	0.0056 0.0068 0.00036 0.0023 0.0079 0.0079 0.0079	SULFATE NYL UG/M3	13 0.6227 0.6227 0.9322 0.9322 0.8758 1.2444 1.2713 1.2713
	NITRIC UG/M3	13 0.4386 0.1082 0.2277 0.2277 0.2185 0.2185	MAGNESIUM UG/M3	13 0.1938 0.10434 0.1125 0.1026 0.1026 0.1028 0.1028	ARSENIC SI UG/M3	0.0004 0.0004 0.0006 0.0005 0.0005 0.0007
	SULFATE UG/M3	13 0.395 0.395 3.395 3.086 3.086 3.086 4.631	ALUMINIUM UG/M3	0.1945 0.0176 0.0585 0.0525 0.0439 0.0374 0.0525	CADMIUM UG/M3	0.00090 0.00017 0.00018 0.00020 0.00038 0.00039 0.00039
OVOL SITE NO.	SULFUR.DIOX UG/M3	19.338 2.685 9.470 3.976 3.976 1.541 10.190	IRON UG/M3	13 0.2261 0.0152 0.0899 0.0689 0.0680 0.0403 0.0720 0.1119	ZINC UG/M3	0.0250 0.0187 0.0186 0.0183 0.0183 0.0183 0.0183
STATION: MERLIN LOVOL SITE NO.1		# OF SAMPLES MAXIMOM MINIMOM ARITH. MEAN ARITH. STD. DEV. GEOOM. MEAN 1ST CORRETILE 3LD CORRETILE 3L		# OF SAMPLES MAXIMON MINIMON ARITH. MEAN ARITH. STD. DEV. GEOWL MEAN 1ST QUARTILE 31D QUARTILE 31D QUARTILE MISSING VALUES		# OF SAMPLES MAXIMOM MINIMOM ARITH. MEAN ARITH. STD. DEV. GEOOL MEAN 1ST QUARTLEE 310 QUARTLEE 310 QUARTLEE MISSING VALOES.

ONTARIO MINISTRY OF ENVIRONBENT & ENERGY APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY 1991 SUMMARY STATISTICS OF CONCENTRATION

	SODIUM UG/M3	0.3991 0.0875 0.1043 0.1000 0.1513 0.2940 0.2376	VANADIUM UG/M3	13 0.0018 0.0016 0.0011 0.0011 0.0012 0.0012		
	POTASSIUM UG/M3	0.1028 0.0028 0.0403 0.0601 0.0579 0.0578 0.0569	NICKEL UG/M3	13 0.0008 0.0000 0.0001 0.0000 0.0000 0.0000		
	CHLORIDE UG/M3	1.008 0.265 0.265 0.2480 0.271 0.3271 0.395	COPPER UG/M3	13 0.0199 0.0010 0.0018 0.0018 0.0017 0.0017 0.0027	TOTAL NITRATE UG/M3	2 13 2 13 2 1 10 2 1 10 1 10 1 10 1 10 1 10 1 10
	CALCIUM UG/M3	13 0.831 0.252 0.552 0.147 0.478 0.397 0.599	MANGANESE UG/M3	0.0120 0.0120 0.0023 0.0023 0.0070 0.0068 0.0086	TOTAL SULFUR UG/M3	11,25 6,57 6,57 6,57 6,24 6,24 6,24 6,87 6,87
	NITRATE UG/M3	13 0.526 0.526 0.277 0.869 0.717 0.938	LEAD UG/M3	13 0 0 0 1 2 7 0 0 0 0 0 7 2 0 0 0 0 0 1 9 0 0 0 0 9 9 0 0 0 0 0 8 8 0 0 0 1 2 0 0 0 0 8	SULFATE NYL UG/M3	13 13 1,5569 1,3367 1,3669 1,1596 1,1596 1,0453 1,0453
	NITRIC UG/M3	13 0.5713 0.0653 0.2569 0.1173 0.2307 0.1753 0.2924	MAGNESIUM UG/M3	13 0.2175 0.2175 0.1048 0.1002 0.1002 0.0953 0.1067 0.1067	ARSENIC SU UG/M3	13 0.0010 0.0003 0.0007 0.0006 0.0007 0.0007
: NO.1	SULFATE UG/M3	8.438 0.275 0.275 1.976 3.771 3.831 5.223	ALUMINIUM UG/M3	13 0.1365 0.0592 0.0363 0.0364 0.0374 0.0434	CADMIUM UG/M3	13 0.00122 0.00014 0.00039 0.00037 0.00034 0.00036 0.00039
PORT STANLEY LOVOL SITE NO.1	SULFUR.DIOX UG/M3	19.841 4.436 10.099 4.534 9.180 6.962 7.393 14.417	IRON UG/M3	0.1978 0.0000 0.0000 0.0025 0.0498 0.0627 0.0627 0.1093	ZINC UG/M3	0.0287 0.0287 0.0121 0.0204 0.0198 0.0199 0.0137
TANL	S					·
STATION: PORT S		# OF SAMPLES MAXIMUM MINIMUM ARITH MEAN ARITH. STD. DEV. GEOM. MEAN 1ST GUARTILE ZND GUARTILE SND GUARTILE SND GUARTILE SND GUARTILE NISSING VALUES		# OF SAMPLES MAXIMUM MINIMUM ARITH. MEAN ARITH. STO. DEV. GEOW. MEAN IST QUARTILE ZND QUARTILE AMISSING VALUES		# OF SAMPLES MAXIMUM MINIMUM ARITH. MEAN ARITH. STD. DEV. GEOM. MEAN 1ST QUARTILE 2ND QUARTILE RESING VARALUES MISSING VARALUES

ONTARIO MINISTRY OF ENVIRONMENT & ENERGY APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY 1991 SUMMARY STATISTICS OF CONCENTRATION

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STATION: SHALLOW LAKE LOVOL SITE NO.1

	SODIUM UG/M3	1.6504 0.1264 0.1826 0.4251 0.2639 0.1337 0.2249	VANADIUM UG/M3	0.0007 0.0000 0.00004 0.00017 0.00017 0.00003		
	POTASSIUM UG/M3	12 9.4728 0.0187 0.0187 0.0631 0.0260 0.0623	NICKEL UG/M3	000000000000000000000000000000000000000		
	CHLORIDE UG/M3	12 0.328 0.018 0.038 0.083 0.192 0.192 0.300	COPPER UG/M3	000000000000000000000000000000000000000	TOTAL NITRATE UG/M3	12 0.87 0.54 0.27 0.27 0.27 0.71
	CALCIUM UG/M3	12 0.589 0.000 0.287 0.275 0.315 0.385	MANGANESE UG/M3	0.0075 0.0003 0.0020 0.0023 0.0023 0.0023 0.0026	TOTAL SULFUR UG/M3	12. 12. 12. 12. 12. 12. 12. 12. 12. 12.
	NITRATE UG/M3	12 0.638 0.000 0.2369 0.382 0.119 0.489	LEAD UG/M3	0.0077 0.0002 0.0002 0.0020 0.0032 0.0030 0.0054	SULFATE NYL UG/M3	12 2.2843 0.1424 1.1819 0.5023 0.9223 1.1696 1.4696
	NITRIC UG/M3	0.3810 0.0000 0.0000 0.1685 0.0944 0.1914 0.1759 0.1759	MAGNESIUM UG/M3	0.1718 0.0096 0.00796 0.07796 0.00786 0.0248 0.0256 0.10350	ARSENIC SU UG/M3	0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000
TE NO.1	SULFATE UG/M3	12 0 5,958 0 0,139 0 1,997 1 1,997 1 1,997 1 1,997 1 1,997 1 2,914 4 2,61	ALUMINIUM UG/M3	0.0615 0.0615 0.0023 0.0213 0.0133 0.0133 0.0151 0.0251	CADMIUM UG/M3	0.00032 0.00000 0.00013 0.00013 0.00144 0.00012 0.00012
LAKE LOVOL SI	SULFUR.DIOX UG/M3	12 0 0000 0 3 719 2 763 1 690 4 109	IRON UG/M3	0.0900 0.0900 0.0312 0.0330 0.0630 0.0153	ZINC UG/M3	0.0118 0.0006 0.0006 0.0057 0.0057 0.0051 0.0069
STATION: SHALLOW LAKE LOVOL SITE NO.1	•	# OF SAMPLES MAXIMUM MINIMUM ARTH. MEAN ARTH. STD. DEV GEOM. MEAN IST CURRILLE SUD CURRILLE SUD CURRILLE SUD CURRILLE MISSING VALUES		# OF SAMPLES MAXIMOM MINIMOM ARTH. MEAN RATH. STD. DEV. GEOOM. MEAN IST QUARTILE 3RD QUARTILE 3RD QUARTILE MISSING VALUES		# OF SAMPLES MAXIMUM MINIMUM ARITH. WEAN ARITH. STD. DEV GEOOU. WEAN 1ST QUARTILE 31D QUARTILE 31D QUARTILE 31D QUARTILE MISSING VALUES

ONTARIO MINISTRY OF ENVIRONMENT & ENERGY APIOS -- ACIDIC PRECIPITATION IN ONTARIO STUDY 1991. SUMMARY STATISTICS OF CONCENTRATION

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	SODIUM UG/M3	0.1680 0.1056 0.1341 0.0257 0.1317 0.1289 0.1680	VANADIUM UG/M3	000000000000000000000000000000000000000		
	POTASSIUM UG/M3	0.00196 0.00196 0.00238 0.00238 0.00196 0.00283	NICKEL UG/M3	000000000000000000000000000000000000000		
	CHLORIDE UG/M3	0.227 0.227 0.227 0.039 0.273 0.273 0.227 0.329	COPPER UG/M3	0.0156 0.0056 0.0056 0.0056 0.0056 0.0010 0.0010	TOTAL NITRATE UG/M3	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
	CALCIUM UG/M3	0.242 0.202 0.0202 0.020 0.020 0.180 0.184 0.242	MANGANESE UG/M3	0.0024 0.0020 0.0020 0.0020 0.0020 0.0020	TOTAL SULFUR UG/M3	2 2 2 2 2 3 3 4 4 3 4 4 4 4 4 4 4 4 4 4
	NITRATE UG/M3	0.000000000000000000000000000000000000	LEAD UG/M3	0.0051 0.0036 0.0036 0.0006 0.0043 0.0043 0.0036	SULFATE NYL UG/M3	0.8260 0.5700 0.10411 0.6931 0.5700 0.5700
	NITRIC UG/M3	3 0.1308 0.1305 0.1647 0.0253 0.1627 0.1305 0.1306 0.1308	MAGNESIUM UG/M3	0.0782 0.0782 0.05643 0.0155 0.05643 0.04644 0.04644	ARSENIC SI UG/M3	000000000000000000000000000000000000000
NO.1	SULFATE UG/M3	1 991 1 795 1 1866 0 091 1 775 1 1933 1 991	ALUMINIUM UG/M3	0.0243 0.0110 0.0174 0.0155 0.0165 0.0169 0.0169	CADMIUM UG/M3	0.00016 0.00010 0.00010 0.00010 0.00000 0.00015 0.00015
PALMERSTON LOVOL SITE NO.1	SULFUR.DIOX UG/M3	6.501 4.148 4.148 5.398 5.398 6.503	IRON UG/M3	0.0264 0.0110 0.0110 0.0071 0.0195 0.0195 0.0257	ZINC UG/M3	0.0149 0.0044 0.0044 0.0083 0.0088 0.0088 0.0088
STATION: PALMERST		# OF SAMPLES MAXIMUM MINIMUM ARITH. MEAN ARITH. STD. DEV. GEON. WEAN 1ST QUARTILE 2ND QUARTILE 3RD QUARTILE ARSSING VALUES MISSING VALUES		# OF SAMPLES MAXINUM MINIMUM ARITH. MEAN ARITH. STD DEV. GEOW MEAN IST GUARTLIE 2ND QUARTLIE 3ND QUARTLIE 3ND QUARTLIE 3ND QUARTLIE 3ND STANG VALUES		# OF SAMPLES PAXING MINIMUM ARITH MEAN ARITH STD DEV- GEOM MEAN IST QUARTILE 2ND QUARTILE 3ND QUARTILE 3ND QUARTILE MISSING VALUES

ONTARIO MINISTRY OF ENVIRONMENT & ENERGY APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY 1991 SUMMARY STATISTICS OF CONCENTRATION

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STATION: GRAND BEND LOVOL SITE NO.1

	SODIUM UG/M3	12 0.2444 0.0773 0.1219 0.0443 0.1159 0.1082 0.1082 0.1156	VANADIUM UG/M3	12 0.0019 0.0003 0.0010 0.0004 0.0009 0.0009		
	POTASSIUM UG/M3	12. 6311 0.0224 1.8444 5.9660 0.0696 0.0321 0.0620	NICKEL UG/M3	0.0005 0.0000 0.0000 0.0000 0.5342 0.0000 0.0000	•	
	CHLORIDE UG/M3	0.494 0.494 0.319 0.090 0.229 0.330	COPPER UG/M3	0.0063 0.0063 0.0020 0.0015 0.0016 0.0020 0.0020	TOTAL NITRATE UG/M3	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
	CALCIUM UG/M3	12 0.928 0.179 0.242 0.488 0.497 0.779	MANGANESE UG/M3	0.0062 0.0062 0.0010 0.0011 0.0038 0.0031 0.0045	TOTAL SULFUR UG/M3	12.58 1.57 1.57 1.24 1.24 2.28 4.76
	NITRATE UG/M3	12 0 981 0 981 0 672 0 639 0 639 0 700 0 700	LEAD UG/M3	0.0212 0.0012 0.0033 0.0043 0.0042 0.0056 0.0056	SULFATE NYL UG/M3	12 0.42887 0.4288 0.8840 0.2441 0.8473 0.6774
	NITRIC UG/M3	0.3070 0.0877 0.1620 0.0584 0.1531 0.1186 0.1168	MAGNESIUM UG/M3	0.1648 0.0337 0.0357 0.0357 0.0357 0.0966 0.0964	ARSENIC SU UG/M3	0.0007 0.0003 0.0003 0.0005 0.0004 0.0004
No.1	SULFATE UG/M3	13.891 0.283 0.283 3.896 3.330 2.796 2.973 4.610	ALUMINIUM UG/M3	12 0.0888 0.0096 0.0314 0.0217 0.0293 0.0269	CADMIUM UG/M3	0.00072 0.00000 0.000026 0.00019 0.00013 0.00022 0.00022
GRAND BEND LOVOL SITE NO.1	SULFUR.DIOX UG/M3	12. 0 0.598. 0 0.551. 2 0.551. 3 0.919. 1 0.003. 1 0.003. 1 0.003.	IRON UG/M3	0.1107 0.0000 0.0000 0.04215 0.0536 0.0536 0.06448	ZINC UG/M3	0.0230 0.0030 0.0050 0.0118 0.0043 0.0111 0.0096 0.0111
ND BEN		DEV.		DEV.		DEV.
STATION: GRA		# OF SAMPLES MAXIMUM MINIMUM ARITH. WEAN ARITH. STO DEV GEOM. MEAN 1ST QUARTILE ZND QUARTILE SND QUARTILE MISSING VALUES		# OF SAMPLES MAXIMUM MINIMUM ARITH. WEAN ARITH. STD. DEV GEOW. MEAN IST QUARTILE ZND GUARTILE ZND GUARTILE MISSING VALUES		# OF SAMPLES MAXIMUM MINIMUM ARITH. MEAN ARITH. STD. DEV GEOM. MEAN 1ST QUARTILE 2ND QUARTILE 3ND QUARTILE 3ND QUARTILE MISSING VALUES

ONTARIO MINISTRY OF ENVIRONMENT & ENERGY APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY 1991 SUMMARY STATISTICS OF CONCENTRATION

TATTON: DORSET LOVOL STITE NO.

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	SODIUM UG/M3	0.2663 0.0866 0.1291 0.0473 0.1226 0.1226 0.1126	VANADIUM UG/M3	0.0000000000000000000000000000000000000	
	POTASSIUM UG/M3	13 0.0902 0.0104 0.0350 0.0199 0.0244 0.0281 0.0361	NICKEL UG/M3	0.0032 0.0005 0.0005 0.0009 0.0000 0.0000	
	CHLORIDE UG/M3	0.234 0.031 0.139 0.133 0.133 0.135 0.155	COPPER UG/M3	0.0180 0.00204 0.00204 0.0014 0.0017 0.0017 0.0020	UG/M3 UG/M3 0.14 0.16 0.29 0.23 0.23 0.32
:	CALCIUM UG/M3	13 0.046 0.046 0.134 0.217 0.138 0.137 0.190	MANGANESE UG/M3	13 0.0259 0.0010 0.0041 0.0024 0.0022 0.0022 0.0038 TOTAL	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
	NITRATE UG/M3	13 0.0462 0.075 0.192 0.094 0.174 0.172 0.211	LEAD UG/M3	7 7 0 0 0 8 6 7 0 0 0 0 8 6 7 0 0 0 0 8 6 7 0 0 0 0 9 9 0 0 0 0 0 9 9 0 0 0 0 0 0	1.2771 1.2771 0.5802 0.2064 0.2064 0.8843 0.7845 0.9956
	NITRIC UG/M3	0.2783 0.0705 0.0155 0.0504 0.1083 0.1077 0.1177	MAGNESIUM UG/M3	0.3267 0.0138 0.0596 0.0596 0.0364 0.0179 0.0179	
	SULFATE UG/M3	13 3.931 1.055 2.224 2.025 2.025 2.025 2.527 0	ALUMINIUM UG/M3	0.013 0.0014 0.0019 0.2007 0.0298 0.0098 0.0098	06/m3 0.00146 0.00019 0.00019 0.00013 0.00010 0.00010
VOL SITE NO.	SULFUR.DIOX UG/M3	13 7 225 0 725 3 049 1 780 2 592 2 592 2 592 3 774	IRON UG/M3	2.4113 0.0000 0.63129 0.1209 0.01209 0.0123	0.0054 0.0052 0.0022 0.0022 0.0057 0.0056 0.0036
STATION: DORSET LOVOL SITE NO.1		HAZINOM MAXINOM MINIBOM MATH, STD. DEV GERM. MEAN STH. STD. DEV STD. DARTILE STD. QUARTILE STD. QUARTILE MISSING VALUES		# OF SAMPLES MAXIMUM MINIMUM MINIMUM ARITH. STD. DEV. GEROM. WEAN IST QUARTILE SID QUARTILE SID QUARTILE SID QUARTILE SID QUARTILE SID GOVERTILE MISSING VALUES :	# OF SAMPLES MAXIMUM MINIMUM ARITH. MEAN ARITH. STD. DEV. GEOM. MEAN IST QUARTILE SUD QUARTILE SUD QUARTILE HISSING VALUES

ONTARIO MINISTRY OF ENVIRONMENT & ENERGY APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY 1991 SUMMARY STATISTICS OF CONCENTRATION

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STATION: CAMPBELLFORD LOVOL SITE NO.1

MILLOS	SODTON UG/M3	0.6765 0.4016 0.5837 0.1288 0.5676 0.4016 0.6731	VANADIUM UG/M3	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		
and the second	UG/M3	0.0903 0.0581 0.0760 0.0134 0.0134 0.0747 0.0581 0.0903	NICKEL UG/M3	0.0034 0.0011 0.0011 0.0011 0.0015 0.0015 0.0015 0.0034		
	CHLOKIDE UG/M3	1.233 0.639 0.639 0.260 0.963 1.133 1.233	COPPER UG/M3	0.0026 0.0026 0.0026 0.0015 0.0026 0.0026	TOTAL NITRATE UG/M3	1 1 2 8 8 1 1 1 1 2 8 8 1 1 1 1 2 8 8 1 1 1 1
	CALCIUM UG/M3	1.134 0.134 0.955 0.958 0.938 0.938 0.938	MANGANESE UG/M3	0.0077 0.0058 0.0058 0.0051 0.0057 0.0075	TOTAL. SULFUR UG/M3	8 4 6 6 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9
	NITRATE UG/M3	1.151 0.794 0.167 0.167 0.167 0.168 0.164 0.1144 1.151	LEAD UG/M3	0.0232 0.0110 0.0166 0.0050 0.0159 0.0110 0.0157	SULFATE NYL UG/M3	3 1.9280 1.1070 1.5386 0.3365 1.4599 1.1070 1.5809
	NITRIC UG/M3	0.3798 0.1798 0.2739 0.0859 0.2598 0.2726 0.3798	MAGNESIUM UG/M3	0.00 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	ARSENIC SI UG/M3	3 0.0020 0.0012 0.0012 0.0014 0.0012 0.0012
1.00	SULFATE UG/M3	4.33.9863 3.9863 3.9863 3.9863 3.9863 4.3663 4.863 0	ALUMINIUM UG/M3	0.0398 0.0359 0.0359 0.0359 0.0347 0.0290 0.3961 0.3961	CADMIUM UG/M3	0.00060 0.00013 0.00013 0.00013 0.00030 0.00030 0.00030
CAMP BELLE OF LOVOL SILE NO.	SULFUR.DIOX UG/M3	14.714 7.038 17.038 11.318 3.196 10.811 7.202 14.714	IRON UG/M3	0.0677 0.0348 0.03567 0.0155 0.0542 0.0348 0.0677	ZINC UG/M3	0.0219 0.0179 0.0173 0.0170 0.0170 0.0150
STATION: CAMPBELLE		# OF SAMPLES MAXIMUM MINEMUM ARITH. WEAN ARITH. STD. DEV GEOW. WEAN IST OUARTILE 3LD QUARTILE MISSING VALUES		# OF SAMPLES MAXTMOM ARTH. WEAN ARTH. STD. DEV. GEOM. MEAN IST QUARTILE ZND COMRTILE ZND COMRTILE SND COMRTILE MISSING VALUES		# OF SAMPLES MAXTMUM MINIMUM ARTH. WENN ARTH. STD. DEV. GEOW. WENN 1ST OUARTILE 31D

ONTARIO MINISTRY OF ENVIRONMENT & ENERGY APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY 1991 SUMMARY STATISTICS OF CONCENTRATION

TATTON: COLDWATER LOVOL SITE NO.1

	SODIUM UG/M3	13 0.2857 0.0544 0.1012 0.0762 0.0836 0.1266 0.1266	VANADIUM UG/M3	0,00000		
	POTASSIUM UG/M3	13 17 0.0209 1.3823 4.5117 0.0312 0.0352 0.0531	NICKEL UG/M3	0.0000		
	CHLORIDE 1	13 0.377 0.000 0.212 0.088 0.248 0.217 0.267	COPPER UG/M3	0.0099 0.0006 0.0021 0.0021 0.0015 0.0017 0.0017	TOTAL NITRATE UG/M3	00.000 00.000 00.000 00.000 00.000 00.000 00.000
	CALCIUM UG/M3	13 0.651 0.332 0.171 0.255 0.261 0.366 0.385	MANGANESE UG/M3	000000000000000000000000000000000000000	TOTAL SULFUR UG/M3	13 13 10 10 10 10 10 10 10 10 10 10 10 10 10
	NITRATE UG/M3	0.517 0.017 0.326 0.131 0.265 0.365 0.407	LEAD UG/M3	00000000000000000000000000000000000000	SULFATE NYL UG/M3	1.4936 0.9057 0.2757 0.2757 0.8458 0.9783
	NITRIC UG/M3	13 0.2868 0.0769 0.0646 0.1375 0.1016 0.1383	MAGNESIUM UG/M3	13 0.0788 0.0050 0.0191 0.0599 0.0599 0.0340 0.0546	ARSENIC SU UG/M3	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
10.1	SULFATE UG/M3	13 5.561 1.455 2.432 2.087 2.239 2.701 0	ALUMINIUM UG/M3	13 0.0448 0.0022 0.0113 0.0149 0.0129 0.0129	CADMIUM .UG/M3	0.00032 0.00000 0.00018 0.00011 0.00011 0.00022 0.00022
STATION: COLDWATER LOVOL SITE NO. 1	SULFUR, DIOX UG/M3	# OF SAMPLES 13 ***ATIVATIVATION** 0 921 **ATIVATION** 0 4265 **ARITH. MEAN 4 2.665 **ARITH. STD. DEV. 2 2.04 **ARITH. 2 2.04 **ARITH. 2 2.04 **ARITH. 2 2.04 **ARITH. 2 3.696 **ARITH. 2 3.696	IRON UG/M3	# OF SAMPLES 13 13 13 14 15 15 15 15 15 15 15	ZINC	# OF SAMPLES 13 WINTHWH 100000 ARITH MEAN 0.0063 ARITH STD. DEV. 0.00023 GEOM. MEAN 0.0055 ARITH STD. DEV. 0.0052 ARITH STD. DEV. 0.0055 ARITH STD. 0048711E 0.0067 MISSING VALUES 0.0079
STAT		# OF SAM MAXIMUM MINIMUM ARITH. M ARITH. S GEOM. ME IST QUAR 2ND QUAR 3RD QUAR 3RD QUAR		# OF SA MAXIMUM MINIMUM ARITH. ARITH. GEOM. M IST QUAL 2ND QUAL 3RD QUAL 3RD QUAL		# OF SAN MAXIMUM MINIMUM ARITH. P ARITH. S GEOM. ME 1ST QUA 2ND QUAL 3RD QUAL

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ATTON: TORONTO ISLAND LOVOL SITE NO.1

MUIGOS	0.0946 0.0946 0.09462 0.2423 0.2423 0.1627 0.1627 0.2476	VANADIUM UG/M3	0.0022 0.0022 0.0004 0.0010 0.0011 0.0011 0.0012		
POTASSIUM	0,0227 0,0283 0,0283 0,0655 0,0655 0,0392 0,0392	NICKEL UG/M3	13 0.0014 0.0000 0.0000 0.0000 0.0000 0.0000		
CHLORIDE	13. 1.807 0.663 0.424 0.565 0.551 0.651	COPPER UG/M3	0.0403 0.0027 0.0087 0.0088 0.0062 0.0050 0.0050	TOTAL NITRATE UG/M3	1 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
CALCIUM	13 1.0455 0.455 0.194 0.763 0.655 0.972	MANGANESE UG/M3	0.0154 0.0054 0.0094 0.0094 0.0094 0.0094 0.0109	TOTAL SULFUR UG/M3	13 2.8.53 2.8.62 2.66 2.66 4.86 6.88
NITRATE	13 13 13 13 13 13 13 13 13 13 13 13 13 1	LEAD UG/M3	0.0192 0.0052 0.0019 0.0019 0.0013 0.0125 0.0125	SULFATE NYL UG/M3	13 0.6829 0.9660 0.9660 0.4764 0.7852 0.7765
NITRIC	0.3884 0.0867 0.0750 0.157 0.157 0.157 0.1531 0.1934	MAGNESIUM UG/M3	0.1890 0.0890 0.1890 0.1313 0.1252 0.1252 0.1314 0.1314	ARSENIC SU UG/M3	0.00016 0.000000000000000000000000000000
ITE NO.1	00/73 6.882 2.581 1.240 1.1240 3.601 5.257	ALUMINIUM UG/M3	13 0.1635 0.0173 0.0615 0.0475 0.0316 0.0450 0.0500	CADMIUM UG/M3	13 0.00162 0.00025 0.00026 0.00034 0.00037 0.00039 0.00039
SLAND LOVOL S SULFUR.DIOX	06/M3 22 13 2.810 8.322 5.544 6.846 6.847 7.068 9.851	IRON UG/M3	13 0.2376 0.0000 0.1007 0.055 0.1137 0.0562 0.0562	ZINC UG/M3	13 0.0561 0.0197 0.0321 0.0312 0.0268 0.0301 0.0351
STATION: TORONTO ISLAND LOVOL SITE NO.1 SULFUR.DIOX SULFA	# OF SAMPLES MAXINGUM MINIMOUM ARITH. STD. DEV. GEDOM. WERAN IST QUARTILE 2ND QUARTILE 2ND QUARTILE 3ND QUART		# OF SAMPLES MAXIMUM MINIMUM ARITH. MEAN ARITH. STD. DEV. GEROM. MERAN IST QUARTILE 2ND QUARTILE 2ND QUARTILE 3ND QUARTILE		# OF SAMPLES HAXINDM MINISUM ANITH. MEAN ARITH. STD. DEV. GEOW. MEAN IST COMERTIEE AND QUARTILE RED OUARTILE

ONTARIO MINISTRY OF ENVIRONMENT & ENERGY APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY 1991 SUMMARY STATISTICS OF CONCENTRATION

STATION: SMITHS FALLS LOVOL SITE NO.1

SODIUM UG/M3	1.0466 0.0744 0.2278 0.2774 0.1583 0.1191 0.1191	VANADIUM UG/M3	12 0.0013 0.0003 0.0007 0.0007 0.0007 0.0008		
POTASSIUM UG/M3	12 0,1182 0,0260 0,0260 0,0238 0,0573 0,0573 0,0568	NICKEL UG/M3	12 0.0018 0.0000 0.0002 0.0000 0.0000 0.0000		
CHLORIDE UG/M3	1.446 0.130 0.347 0.374 0.258 0.251 0.257	COPPER UG/M3	0.0104 0.0005 0.0005 0.0028 0.0012 0.0017 0.0014	TOTAL NITRATE UG/M3	10000000000000000000000000000000000000
CALCIUM UG/M3	. 0.813 0.123 0.123 0.198 0.364 0.271 0.584	MANGANESE UG/M3	0.0103 0.0103 0.00204 0.0023 0.0049 0.0037 0.0068	TOTAL SULFUR UG/M3	2 2 2 2 2 2 2 3 3 2 2 2 2 3 3 2 2 2 3 3 2 2 3
NITRATE UG/M3	12 0.791 0.327 0.387 0.286 0.329 0.329	LEAD UG/M3	0.00170 0.00170 0.0001 0.0001 0.0035 0.0035 0.0035	SULFATE NYL UG/M3	1,3379 0,6204 1,0030 0,2445 0,9705 0,9705 1,2107
NITRIC UG/M3	0.2505 0.1245 0.1246 0.052 0.052 0.1051 0.1052	MAGNESIUM UG/M3	12 0.2844 0.0308 0.0766 0.0766 0.0868 0.0529 0.0529	ARSENIC SU UG/M3	0.00002
SULFATE UG/M3	12 1.668 1.342 2.342 2.598 1.918 2.493 3.715	ALUMINIUM UG/M3	12 0.0948 0.0304 0.0234 0.0251 0.0208 0.0208	CADMIUM UG/M3	0.00026 0.00000 0.00014 0.00013 0.00013 0.00013
SULFUR.DIOX UG/M3	12 8.363 9.0732 3.063 1.963 1.963 2.586 2.586 2.569 3.107	IRON UG/M3	0.01182 0.0332 0.0597 0.0597 0.0537 0.0886 0.0886 2	ZINC UG/M3	0.0144 0.0030 0.0030 0.0034 0.0077 0.0064 0.0069
SUL SULLING SHALLS SULL	# OF SAMPLES MAXIMUM MINIMUM ARITH. WEN ARITH. STD. DEV. GEOM. MRAN 1ST GUARTILE ZND GUARTILE SND GUARTILE MISSING VALUES		# OF SAMPLES MAXINUM MINIMUM ARITH. MEAN ARITH. STD. DEV. GEOM. MEAN 1ST QUARTILE ZND QUARTILE ZND QUARTILE ZND QUARTILE MISSING VALUES		# OF SAMPLES MAXIMUM MINIMUM ALTH. MEAN ARTH. STD. DEV. GEOM. MEM. 11ST GUARTILE 2ND QUARTILE 3ND QUARTILE MISSING VALUES

ONTARIO MINISTRY OF ENVIRONMENT & ENERGY APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY 1991 SUMMARY STATISTICS OF CONCENTRATION

STATION: PT. PETRE LOVOL SITE NO.1

SODIUM UG/M3	12 0.2621 0.1657 0.055 0.0459 0.1562 0.1563 0.1523	VANADIUM UG/M3	0.0020 0.0020 0.0010 0.0010 0.0021 0.0011			
POTASSIUM UG/M3	12 0.1166 0.0323 0.0660 0.0603 0.0603 0.0427 0.0653	NICKEL UG/M3	0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000			
CHLORIDE UG/M3	12 0.439 0.0352 0.0307 0.0308 0.2555 0.3396 0.3396	COPPER UG/M3	0.0034 0.0000 0.0000 0.0010 0.0011 0.0016 0.0016 0.0031	TOTAL NITRATE UG/M3	11.0000.0000.0000.0000.0000.0000.0000.	
CALCIUM UG/M3	12 0.488 0.000 0.127 0.127 0.395 0.326 0.436	MANGANESE UG/M3	0.0050 0.0050 0.0034 0.0055 0.0055 0.0053 0.0053 1.0053	TOTAL SULFUR UG/M3	12 2.40 2.80 3.87 0.77 0.77 3.35 4.12 1.12	
NITRATE UG/M3	12 0.758 0.758 0.569 0.129 0.549 0.521 0.572 0.675	LEAD UG/M3	0.0111 0.0111 0.0005 0.00063 0.0051 0.0057 0.0056	SULFATE NYL UG/M3	12 0.5800 0.6890 1.6890 0.5456 1.5283 1.5523 2.1424	
NITRIC UG/M3	127 0.3127 0.2574 0.0633 0.2536 0.2536 0.2842 0.2842	MAGNESIUM UG/M3	0.0773 0.0773 0.0504 0.0195 0.0707 0.0707 0.0528 0.0658	ARSENIC SU UG/M3	0.0010 0.0010 0.0000 0.0003 0.0004 0.0007	
SULFATE UG/M3	6.305 6.305 7.354 7.353 1.451 7.113 7.811 6.039	ALUMINIUM UG/M3	0.0738 0.0022 0.0033 0.0198 0.0257 0.0251 0.0251	CADMIUM UG/M3 .	0.00036 0.00030 0.00010 0.00111 0.000114 0.00017	
SULFUR.DIOX UG/M3	9.105 2.991 4.9931 1.8830 1.213 4.5113 6.3213 1.217	IRON UG/M3	0.1067 0.0000 0.0034 0.0353 0.0993 0.0993 0.0891	ZINC UG/M3	0.0178 0.0178 0.0000 0.0103 0.0166 0.0103 0.0103	
9,						
STAILON: FT. FEITE LOVOL SILE NO.1 SULFUR.DIOX UG/M3	# OF SAMPLES MAXIMUM MINIMUM ARITH. MEAN ARITH. STD. DEV. GEOM. MEAN 1ST QUARTILE ZND QUARTILE ZND QUARTILE MISSING VALUES		# OF SAMPLES MAXINUM MINIMUM ARITH. MEAN ARITH. STD. DEV. GEOM. MANN 1ST QUARTILE ZND QUARTILE ZND QUARTILE MISSING VALUES		# OF SAMPLES MAXINUM MINITUM ARITH. MEAN ARITH. STD. DEV. GEOM. MEAN 1ST QUARTILE 3RD QUARTILE 3RD QUARTILE 3RD QUARTILE MISSING VALUES	

ONTARIO MINISTRY OF ENVIRONBENT & ENERGY APIOS - ACIDIC PRECIPITATION IN ONTARIO SYUDY 1991 SUMMARY STATISTICS OF CONCENTRATION

NOTHER NO. MODELLIND TOWN. STEER NO.

MITTEROS	UG/M3	0.5109 0.2339 0.3539 0.1165 0.3343 0.2339 0.5127 0.5109	VANADIUM UG/M3	0.00001 0.00001 0.00001 0.00001 0.00001 0.00001		
POTASSTIM	UG/M3	0.0431 0.0273 0.0268 0.0361 0.0361 0.0273 0.0273	NICKEL UG/M3	000000000000000000000000000000000000000		
CHLORIDE	UG/M3	0.826 0.519 0.519 0.219 0.364 0.367 0.367	COPPER UG/M3	0.0046 0.0014 0.0016 0.0026 0.0027 0.0018 0.0018	TOTAL NITRATE UG/M3	0.74 0.14 0.15 0.16 0.49 0.74 0.74
CALCITIM	UG/M3	0.018 0.078 0.078 0.073 0.049 0.1069	MANGANESE UG/M3	0.00012 0.00012 0.00012 0.00012 0.0012 0.0012 0.0012	TOTAL SULFUR UG/M3	6.28 9.57 9.85 9.85 9.57 6.28 6.28
NTTRAPE	UG/M3	0.450 0.225 0.102 0.105 0.225 0.225 0.230 0.230	LEAD UG/M3	0001123 000032 000032 000032 000032 000112	SULFATE NYL UG/M3	1.7288 1.7288 1.40029 1.4003 1.3657 1.4691 1.7288
CLARIN	UG/M3	0.2859 0.1750 0.1750 0.0519 0.2067 0.1750 0.2859	MAGNESIUM UG/M3	0.0320 0.0267 0.0267 0.0263 0.0263 0.0267 0.02707 0.02707	ARSENIC SU UG/M3	0.00004 0.00004 0.0006 0.0006 0.0006
SIII.FATE	UG/M3	2.465 1.841 1.841 2.159 2.257 2.220 2.220 650	ALUMINIUM UG/M3	0.0160 0.0023 0.0051 0.0059 0.0069 0.0069 0.0003	CADMIUM UG/M3	0.00025 0.00000 0.00012 0.00012 0.00012 0.00020 0.00020 0.0025
STATION: MCKELLAR LOVOL SITE NO.1	UG/M3	# OF SAMPLES 10.920 MAXIMUM 7.923 ARITH. MEAN 9,421 ARITH. STD. DEV. 1499 GEOM. MEAN EST. 7.923 1ST CUARTILE 9,421 SND CUARTILE 9,421 MISSING VALUES 10.920	IRON	# OF SAMPLES MAXIMUM MINIMUM ALITH. MEAN GEOW. MEAN IST QUARTILE TO COUNTILE SING VALUES MISSING VALUES O 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	ZINC UG/M3	# OF SAMPLES MAXIMUM MINITOUM ARITH. MEAN GEOW. MEAN IST CUMBERS 2ND CUMPTILE 2ND CUMPTILE 3ND CUMPTILE 3ND CUMPTILE MISSING VALUES 0.0055

ONTARIO MINISTRY OF ENVIRONMENT & ENERGY APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY 1991 SUMMARY STATISTICS OF CONCENTRATION

THE NO. STEEL ARNEY LOVOI, STEE NO.

	SODIUM UG/M3	13 0.1514 0.1053 0.0293 0.0293 0.1013 0.0911 0.1340	VANADIUM UG/M3	000000000000000000000000000000000000000		
	POTASSIUM UG/M3	13 0.0541 0.0541 0.0354 0.0341 0.0348 0.0348	NICKEL UG/M3	000000000000000000000000000000000000000		. •
	CHLORIDE UG/M3	0.255 0.111 0.156 0.041 0.151 0.139 0.176	COPPER UG/M3	0.0050 0.0050 0.0021 0.0021 0.0021 0.0021 0.0026	TOTAL NITRATE UG/M3	0.35 0.31 0.33 0.33 0.35 0.36
	CALCIUM UG/M3	0.000 0.000 0.183 0.205 0.163 0.163 0.165 0.185	MANGANESE UG/M3	0.0049 0.0012 0.0012 0.0010 0.0020 0.0020 0.0025	TOTAL SULFUR UG/M3	00.00 00
	NITRATE UG/M3	13 0 354 0 076 0 087 0 184 0 113 0 270	. LEAD UG/M3	133 0.0132 0.0011 0.0055 0.0048 0.0048 0.0040 0.0049	SULFATE NYL UG/M3	13 0.4689 0.9968 0.2243 0.9701 0.9696 1.0644 1.1263
	NITRIC UG/M3	13 0.2071 0.0297 0.0470 0.1223 0.1353 0.1692	MAGNESIUM UG/M3	13 0.1749 0.0196 0.0899 0.0321 0.02812 0.0392	ARSENIC SU UG/M3	13 0.0015 0.0004 0.0007 0.0005 0.0005 0.0007
10.1	SULFATE UG/M3	5.843 1.5843 1.1845 1.1245 1.1245 1.006 2.378 0	ALUMINIUM UG/M3	13 0.0816 0.0028 0.0251 0.0163 0.0121 0.0131	CADMIUM UG/M3	13 0.00051 0.00000 0.00014 0.00013 0.00013 0.00022 0.00031
LOVOL SITE N	SULFUR.DIOX UG/M3	13 16,757 0 529 5,481 4,234 3,787 2,376 6,458 6,458	IRON UG/M3	13 0.1516 0.0000 0.0344 0.0393 0.0151 0.0151 0.0423	ZINC UG/M3	13 0.0068 0.0040 0.0059 0.0055 0.0055 0.0056
STATION: KILLARNEY LOVOL SITE NO.1		# OF SAMPLES MAXIMON MINIMON ARITH. WENN ARITH. STD. DEV. IST QUARTILE STD GUARTILE		# OF SAMPLES NAXIMON NINIMON SATTH. WENN ARITH. STD. DEV. IST QUARTILE 3RD QUARTILE		# OF SAMPLES NATIONO ALINIMON ARITH. WENN ARITH. STD. DEV. GEOM. WENN IST QUARTILE 3RD QUARTILE 3RD QUARTILE 3RD QUARTILE MISSING VALUES

ONTARIO MINISTRY OF ENVIRONMENT & ENERGY APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY 1991 SUMMARY STATISTICS OF CONCENTRATION

STATION: MATTAWA LOVOL SITE NO.1

	SODIUM UG/M3	12 0.0876 0.0832 0.1475 0.0595 0.1376 0.1106 0.1106	VANADIUM UG/M3	0.0000000000000000000000000000000000000		
	POTASSIUM UG/M3	12 0.0810 0.0281 0.0493 0.0467 0.0467 0.0346 0.0538	NICKEL UG/M3	000000000000000000000000000000000000000		
	CHLORIDE UG/M3	0.3477 0.112 0.194 0.198 0.118 0.260	COPPER UG/M3	0.0041 0.0011 0.0020 0.0020 0.0020 0.0016 0.0019	TOTAL NITRATE UG/M3	000.11 000.12 000.12 000.12 000.24
	CALCIUM UG/M3	12 0.262 0.092 0.057 0.057 0.152 0.101 0.203	MANGANESE UG/M3	0.00016 0.00016 0.00016 0.00017 0.00017 0.00017 0.00017	TOTAL SULFUR	12 12 10 10 11 15 10 10 10 10 10 10 10 10 10 10 10 10 10
	NITRATE UG/M3	12 0.388 0.159 0.159 0.130 0.173 0.202	LEAD UG/M3	000000000000000000000000000000000000000	SULFATE NYL UG/M3	12.6887 0.8586 1.2920 0.4853 1.2233 0.8770 1.1144 1.3188
	NITRIC UG/M3	12 0.1643 0.0632 0.0320 0.0320 0.0330 0.0770 0.0770 0.1356	. MAGNESIUM UG/M3	0.0906 0.0189 0.0189 0.0230 0.02416 0.0231 0.0538	ARSENIC SU UG/M3	0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000
-	SULFATE UG/M3	3.765 1.368 1.368 0.736 2.294 1.761 2.831	ALUMINIUM UG/M3	0.2357 0.0045 0.0049 0.0296 0.0296 0.0142 0.0454	CADMIUM UG/M3	0.00030 0.00000 0.00000 0.00016 0.00010 0.00000 0.00017 0.00017
OVOL SILE NO.	SULFUR.DIOX UG/M3	12 9 121 0 121 0 1802 3 182 2 326 2 285 2 621 5 622	IRON UG/M3	12 0.2357 0.0000 0.0000 0.0721 0.1305 0.0080 0.0080 0.1303	ZINC UG/M3	12 0.0106 0.0038 0.0067 0.0065 0.0065 0.0069
STATION: MAILAWA LOVOL SILE NO.1		# OF SAMPLES MAXIMUM MINIMUM HEAN ARITH WEAN ARITH STD. DEV. GEOOV. MEAN IST QUARTILE 2ND QUARTILE 3ND QUARTILE 3ND QUARTILE MISSING VALUES		# OF SAMPLES MAXIMOM MINIMOM ARITH. WEAN ARITH. STD. DEV. GEOOM. WEAN IST QUARTILE 3ND QUARTILE 3ND QUARTILE MISSING VALUES		# OF SAMPLES MAXIMUM ARTH ARTH ARTH ARTH STD EDOU STD

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COMCANDA LOVOT, STRE NO. 1

SODIUM	UG/M3	13 0,3076 0,0679 0,1269	0.0646 0.1144 0.0881	0.0960 0.1588	VANADIUM UG/M3	0.0004	0.0001	0.0001	5					
POTASSIUM	UG/M3	13 0.0588 0.0216 0.0316	0.0106 0.0302 0.0243	0.0270 0.0338	NICKEL UG/M3	0.0000	0.0000	00000						
CHLORIDE		13 0.365 0.061 0.143	0.073 0.130 0.108	0.124 0.157	COPPER UG/M3	0.0040	0.0025 0.0010 0.0023	0.0019 0.0023 0.0034	TOTAL	NITRATE UG/M3	0.09 0.09	0.23	0.19	0
CALCTUM	UG/M3	0.204 0.000 0.087	0.058	0.112	MANGANESE UG/M3	0.0038 0.0008	0.0019 0.0008 0.0018	0.0013 0.0017 0.0023	TOTAL	SULFUR UG/M3	3.97	2.57 1.03 2.27	1.82	0
NTTRATE	UG/M3	0.245 0.032 0.122	0.058	0.120	LEAD UG/M3	0.0000	0.0038 0.0016 0.0060	0.0029	0	SULFATE NYL UG/M3	13 1.6443 0.4505	1.0378 0.3274 0.9815	0.7885	0
STRUIN	UG/M3	13 0.1784 0.0541 0.1085	0.0363	0.0966 0.1327 0	MAGNESIUM UG/M3	0.0533 0.0154	0.0285 0.0112 0.0265	0.0213 0.0254 0.0319		ARSENIC SU UG/M3	13 0.0030 0.0000	0.0008 0.0008 0.0012	0.0004	0 0
.1	UG/M3	13 4.435 0.806	0.927	1.849 2.274 0	ALUMINIUM UG/M3	0.0562 0.0041	0.0187 0.0146 0.0142	0.0089 0.0165 0.0214		CADMIUM UG/M3	0.00036 0.00012	0.00023 0.00008 0.00021	0.00013	0.00020
LOVOL SITE NO	SULFUR.DIOA UG/M3	6.710	1.984	3.872 5.195 0	IRON UG/M3	0.1297 0.0000	0.0337 0.0355 0.0718	0.0117 0.0204 0.0455	0	ZINC UG/M3	0.0097 0.0037	0.0055 0.0018 0.0053	0.0043	0.0064
STATION: GOWGANDA LOVOL SITE NO.1		# OF SAMPLES MAXIMUM MINIMUM PATTER MEDIAN	ARITH. STD. DEV. : GEOM. MEAN	2ND QUARTILE 3RD QUARTILE 18 MISSING VALUES 18		# OF SAMPLES : MAXIMUM : MINIMUM	ARITH. MEAN : ARITH. STD. DEV. : GEOM. MEAN :	1ST QUARTILE :	MISSING VALUES :		# OF SAMPLES MAXIMUM MINIMUM	ARITH. MEAN ARITH. STD. DEV.	1ST QUARTILE ::	ALSSING VALUES :

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1 ON THIS TOUGH TOWN STATE NO. 1

STATION: MOONBEAM LOVOL SITE NO.1	AM LOVOL SITE	NO.1						
	SULFUR.DIOX UG/M3	SULFATE UG/M3	NITRIC UG/M3	NITRATE UG/M3	CALCIUM UG/M3	CHLORIDE UG/M3	POTASSIUM UG/M3	SODIUM UG/M3
# OF SAMPLES MAXIMUM MINIMUM ARITH MEAN ARITH STD. DEV. GEON. WEAN 1ST CORRTILE ZND CORRTILE ZND CORRTILE ZND CORRTILE MISSING VALUES	2 770 0 0 9402 0 0 9402 0 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1.0942 1.0942 1.0990 1.0990 1.113 1.113 1.644	0.0965 0.0000 0.0053 0.0253 0.0511 0.0370 0.0410	0.176 0.012 0.080 0.081 0.067 0.057 0.057	0.704 0.704 0.249 0.232 0.232 0.125 0.139 0.139	0.703 0.116 0.243 0.167 0.205 0.131 0.139 0.199	11 0.0966 0.0174 0.025 0.0327 0.0327 0.0327 0.0315	0.3776 0.0430 0.1510 0.0950 0.1256 0.0764 0.10764
	IRON UG/M3	ALUMINIUM UG/M3	MAGNESIUM UG/M3	LEAD UG/M3	MANGANESE UG/M3	COPPER UG/M3	NICKEL UG/M3	VANADIUM UG/M3
# OF SAMPLES MAXIMUM ARITH MEM ARITH SED. GEORI MEMI IST QUARTILE 3ND QUARTILE BRISHER ORRATILE RESING YALDES	11 0.1064 0.0069 0.0381 0.0390 0.0390 0.0390 0.00957 0.00957 0.00957	0.1438 0.0015 0.03615 0.0439 0.0172 0.0172 0.0153	0.1658 0.0000 0.0000 0.05458 0.0625 0.0625 0.0215 0.0353	0.0094 0.0001 0.0029 0.0029 0.0019 0.0011 0.0026	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0.0059 0.0000 0.0000 0.0016 0.0016 0.0003 0.0023	0.0000000000000000000000000000000000000	0.0000000000000000000000000000000000000
	ZINC UG/M3	CADMIUM UG/M3	ARSENIC S UG/M3	SULFATE NYE.	TOTAL SULFUR UG/M3	TOTAL NITRATE UG/M3		
# OF SAMPLES MAXIMUM MINIMUM ARITH MEAN ARITH. STD DEV. GEOM. MEAN 1ST QUARTILE ZND QUARTILE SND QUARTILE MISSING VALUES	11 0 0 0 1 1 7 0 0 0 0 0 2 8 0 0 0 0 0 2 8 0 0 0 0 0 2 3 0 0 0 0 0 2 3 0 0 0 0 0 3 3 0 0 0 0 0 3 3 0 0 0 0 3 3 0 0 0 0	11 0.00059 0.00010 0.00011 0.00021 0.00000 0.00000	0.0002 0.0003 0.0000 0.0007 0.0000 0.0002 0.0002	1.3156 0.0616 0.0186 0.5888 0.5888 0.5117 0.6112	11 1.75 0.03 0.04 0.46 0.66 0.64 0.99	000000000000000000000000000000000000000		

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	SODIUM UG/M3	13 0.1419 0.0641 0.0942 0.0223 0.0916 0.0929 0.0929	VANADIUM UG/M3	0.000000000000000000000000000000000000		
	POTASSIUM UG/M3	13 0.0533 0.0053 0.0284 0.0137 0.0245 0.0200 0.0237 0.0383	NICKEL UG/M3	000000000000000000000000000000000000000		
	CHLORIDE UG/M3	0.199 0.199 0.068 0.111 0.037 0.107 0.127	COPPER UG/M3	0.0124 0.0020 0.0020 0.0020 0.0021 0.0021 0.0009	TOTAL NITRATE UG/M3	0.34 0.23 0.23 0.21 0.21 0.24 0.29
	CALCIUM UG/M3	13 0.349 0.000 0.000 0.015 0.057 0.057 0.158	MANGANESE UG/M3	0.00273 0.00016 0.0016 0.00111 0.00111	TOTAL SULFUR UG/M3	134 1.34 1.34 1.34 1.91 0
	NITRATE UG/M3	0.218 0.034 0.034 0.054 0.014 0.084 0.143	LEAD UG/M3	13 0.0080 0.0080 0.0025 0.0021 0.0021 0.0026 0.0026	SULFATE NYL UG/M3	13 2 0511 0 5256 1 0491 0 3890 0 9807 0 8472 1 1021
	LIC M3	13 784 517 5002 3340 944 744 030	MAGNESIUM UG/M3	13 0.00490 0.0073 0.0241 0.0100 0.0219 0.0236		m 10 0 0 10 1 m 0 0 1 m 0
	NITRIC UG/M3	0.1784 0.0517 0.0517 0.0340 0.0944 0.0744 0.170	MAG		ARSENIC UG/M3	0.0006 0.0000 0.0002 0.0002 0.0138 0.0000 0.0000
TE NO.1	SULFATE UG/M3	13 4 . 8 11 10 . 7433 11 . 117 11 . 117 11 . 220 2 . 480	ALUMINIUM UG/M3	13 0.0465 0.0010 0.0030 0.0031 0.0064 0.0064 0.0062	CADMIUM UG/M3	0.00012 0.00012 0.00000 0.00006 0.01540 0.00000 0.00000
TURKEY LAKES LOVOL SITE NO.1	SULFUR.DIOX UG/M3	2.808 0.000 1.740 0.856 1.650 2.068 2.489	IRON UG/M3	0.0534 0.0534 0.0178 0.0178 0.0168 0.0100 0.0103 0.0183	ZINC UG/M3	0.0103 0.0019 0.0042 0.0025 0.0036 0.0025 0.0047
Y LAKE	sn					
STATION: TURKE		# OF SAMPLES MAXIMUM MINITHOM ARTH. MEAN ARTH. STD. DEV GEOW. MEAN IST CUARTILE INT CUARTILE SAND CUARTILE SAND CUARTILE MISSING VALUES		# OF SAMPLES MAXIMUM MINITHOM ARITH. MEAN ARITH. STD. DEV GEOW. MEAN IST CUBARTILE ZND CUBARTILE ZND CUBARTILE ZND CUBARTILE ZND CUBARTILE MISSING VALUES		# OF SAMPLES MAXIMUM MINIMUM ARITH. WEAN ARITH. STD. DEV GEOW. MEAN 1ST QUARTILE 2ND QUARTILE 2ND QUARTILE 3ND QUARTILE 3ND QUARTILE 3ND GUARTILE

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STATION: MCFARLANE LAKE LOVOL SITE NO.1

SIRITON: HOLHWARM THE TOACH	TANE		1.00						
	Ŋ	SULFUR.DIOX UG/M3	SULFATE UG/M3	NITRIC UG/M3	NITRATE UG/M3	CALCIUM UG/M3	CHLORIDE UG/M3	POTASSIUM UG/M3	SODIUM SODIUM
# OF SAMPLES MAXIMUM MINIMUM ARITH. MEAN ARITH. STD. DEV. GEOM. MEAN IST QUARTILE 2ND QUARTILE 3RD QUARTILE MISSING VALUES		25.070 3.017 13.028 6.374 9.979 5.041 11.400 15.850	13 0 6,819 0 7445 0 7445 1 7723 1 7471 1 7959 1 7959 2 781 0 781	13 0.1662 0.0468 0.1271 0.0337 0.1212 0.13169 0.1395	0 359 0 056 0 056 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	13. 0.240 0.240 0.143 0.066 0.115 0.118 0.155 0.198	13 1.857 0.102 0.528 0.619 0.289 0.157 0.531	13 0.0014 0.0038 0.0403 0.0359 0.0359 0.0402 0.0478	13 1.4044 0.3665 0.3665 0.0975 0.0975 0.3424
		IRON UG/M3	ALUMINIUM UG/M3	MAGNESIUM UG/M3	M LEAD UG/M3	MANGANESE UG/M3	COPPER UG/M3	NICKEL UG/M3	VANADIUM UG/M3
# OF SAMPLES MAXIMUM MINIMUM ARITH. MEAN ARITH. STD. DEV. GEOW. MEAN IST QUARTILE 2ND QUARTILE 3ND QUARTILE MISSING VALUES MISSING VALUES		13 0.2006 0.0264 0.0382 0.0514 0.0831 0.0655 0.0557 0.1338	13 0.1298 0.0002 0.0383 0.0237 0.0232 0.0319 0.0319	0.0637 0.0020 0.0020 0.0162 0.0563 0.0563 0.05633	13 7 0.0064 2 0.0095 2 0.0042 3 0.0083 9 0.0083 0.0083 0.0083	0.0073 0.0073 0.0016 0.0016 0.0052 0.0052 0.0052	13 0.0396 0.0035 0.0135 0.0116 0.0116 0.0119 0.0119	13 0 00036 0 00000 0 00010 0 00385 0 00000 0 0005	000000000000000000000000000000000000000
		ZINC UG/M3	CADMIUM UG/M3	ARSENIC UG/M3	SULFATE NYL UG/M3	TOTAL SULFUR UG/M3	TOTAL NITRATE UG/M3		
# OF SAMPLES PAXIOUM MINIMUM ARITH. MEN ARITH. STO. DEV. GEOW. MEAN IST QUARTILE ZND QUARTILE SND QUARTILE MISSING VALUES MISSING VALUES		000013 000016 000003 000000 000000000000	13 0.00253 0.00000 0.000057 0.00126 0.00047 0.00062	000000 000000 000000 000000 000000 00000	1,3305 0,6649 0,6649 0,1915 1,0115 1,0945 1,1250	13.19 2.75 6.81 3.12 6.07 3.40 6.46 8.66	0.12 0.12 0.13 0.10 0.33 0.31 0.31		· .

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STATION: HANMER-2 LOVOL SITE NO.1

			Σ	#F4545555		
	SODIUM UG/M3	13 0.4150 0.0727 0.1920 0.1175 0.1618 0.1478 0.1478	VANADIUM UG/M3	0.0000000000000000000000000000000000000		
	POTASSIUM UG/M3	13 0.0139 0.0178 0.0471 0.0425 0.0425 0.0336 0.0386	NICKEL UG/M3	13 0.0039 0.0000 0.0001 0.3977 0.0000 0.0000		
	CHLORIDE UG/M3	0.571 0.084 0.260 0.154 0.219 0.219 0.340	COPPER UG/M3	0.0202 0.0003 0.0104 0.0052 0.0052 0.0092 0.0092 0.0092	TOTAL NITRATE UG/M3	0.59 0.17 0.13 0.32 0.32 0.35 0.35
	CALCIUM UG/M3	13 0.242 0.125 0.125 0.066 0.146 0.117 0.117	MANGANESE UG/M3	0.0077 0.0020 0.0016 0.0036 0.0036 0.0036 0.0036	TOTAL SULFUR UG/M3	11.43 11.43 1.00 1.00 2.52 2.52 6.53 6.53 7.82
	NITRATE UG/M3	1389 0.389 0.190 0.190 0.174 0.163 0.163	LEAD UG/M3	13 0.0132 0.0000 0.0029 0.0122 0.0071 0.0093	SULFATE NYL UG/M3	13 0.7429 0.3680 0.3680 1.2368 1.2005 1.2964 1.4761
	NITRIC UG/M3	0.2055 0.0901 0.0914 0.0364 0.0366 0.1366 0.15092	MAGNESIUM UG/M3	0.1011 0.0219 0.0224 0.0376 0.0378 0.0338 0.0368	ARSENIC SU UG/M3	13 0.0049 0.0007 0.0016 0.0016 0.0010 0.0010 0.0021
0.1	SULFATE UG/M3	13 6.976 1.272 2.755 2.755 1.475 1.904 2.337 2.692	ALUMINIUM UG/M3	13 0.4616 0.0070 0.0170 0.0430 0.02647 0.02647	CADMIUM UG/M3	13 0.00135 0.00031 0.00031 0.00123 0.00065 0.00066
LOVOL SITE NO	SULFUR.DIOX UG/M3	18 208 0.777 10.939 4.610 9.088 7.639 11.844 13.874	IRON UG/M3	13 0.3297 0.0222 0.0222 0.0855 0.0718 0.0718 0.0718	ZINC UG/M3	0.0137 0.0048 0.0084 0.0086 0.0081 0.0066 0.0076 0.0106
R-2						
STATION: HANMER-Z LOVOL SITE NO.1		# OF SAMPLES MAXIMUM MINIMUM ARITH. STD. DEV, GEOM. MEAN 1ST QUARTILE 2ND QUARTILE 3ND QUARTILE 3ND QUARTILE 3ND QUARTILE MISSING VALUES		# OF SAMPLES MAXTHUM MINIMUM ARTH: WEAN ARTH: WEAN IST QUARTILE ZND QUARTILE ZND QUARTILE ZND QUARTILE ZND QUARTILE ZND QUARTILE ZND QUARTILE MISSING VALUES		# OF SAMPLES MAXIMUM MINIMUM ARITH. STD. DEV GEOW. MEAN 1ST QUARTILE ZND QUARTILE ZND QUARTILE SND QUARTILE SND QUARTILE MISSING VALUES

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	SODIUM UG/M3	0.5486 0.0876 0.2258 0.1541 0.1835 0.1770 0.3327	VANADIUM UG/M3	0.0130 0.0000 0.0024 0.0029 0.0029 0.0002		
	POTASSIUM UG/M3	0.0790 0.0137 0.0418 0.0183 0.0375 0.0316 0.0389	NICKEL UG/M3	0.00003 0.0003 0.0003 0.0003 0.0003 0.0003 0.0003 0.0003		
	CHLORIDE UG/M3	0.865 0.153 0.359 0.242 0.296 0.257 0.557	COPPER UG/M3	0.4455 0.0132 0.1416 0.1872 0.0504 0.0271 0.4288	TOTAL NITRATE UG/M3	00000000000000000000000000000000000000
	CALCIUM UG/M3	14 430 0 000 2 702 2 702 4 928 0 719 0 137 3 551	MANGANESE UG/M3	0.2220 0.0220 0.0575 0.0815 0.0182 0.0062 0.0062	TOTAL SULFUR UG/M3	9.32 1.00 1.00 1.00 1.12 1.12 1.12 1.12
	NITRATE UG/M3	0.296 0.116 0.207 0.061 0.197 0.135 0.235	LEAD . UG/M3	0.3293 0.0044 0.0992 0.1348 0.0175 0.0177 0.2939	SULFATE NYL UG/M3	2.5808 0.6593 1.2724 0.6593 0.6293 1.1471 0.7328 1.1342 1.6617
	NITRIC UG/M3	0.1993 0.0710 0.1295 0.0401 0.1232 0.1232 0.1277 0.1573	MAGNESIUM UG/M3	2.4790 0.0354 0.5321 0.8399 0.1598 0.0447 0.1203 0.8571	ARSENIC SU UG/M3	0.0851 0.0015 0.0015 0.0235 0.0337 0.0058 0.0015 0.0020
	SULFATE UG/M3	4.283 1.583 2.410 0.890 0.890 1.271 2.101 2.955 2.942	ALUMINIUM UG/M3	3.7000 0.0418 0.7533 1.2413 0.2168 0.0487 0.1621	CADMIUM UG/M3	0.02571 0.0016 0.00172 0.00973 0.00287 0.00125 0.00125
STATION: GARSON LOVOL SITE NO.1	SULFUR.DIOX UG/M3	16.676 0.768 9.849 6.148 6.706 3.085 12.833 16.573	IRON UG/M3	13.4532 0.1061 2.6592 4.5883 0.5637 0.1295 0.4053 3.9322	ZINC UG/M3	0.5180 0.1085 0.1270 0.1870 0.0375 0.0159 0.2333
LO	0,					
N: GARSON		# OF SAMPLES ANXINGM ARITH. MEAN ARITH. STD. DEV. BEDEW. MEAN IST QUARTILE NID QUARTILE STD QUAR		# OF SAMPLES MAXIMUM ARITH. MEAN ARITH. STD. DEV. ESCOM. MEAN IST QUARTILE STD. QUARTILE		# OF SAMPLES MAXIMUM ANTIMUM ARTH. MEAN ARTH. STD. DEV. GEOCH, MEAN 1ST QUARTILE ZND QUARTILE ZND QUARTILE SND QUARTILE MISSING VALUES
STATIC		# OF SAMPLES MAXIMUM MAXIMUM ARITH, MEAN ARITH, STD. GEOM, MEAN 1ST QUARTILI 3ND QUARTILI 3ND QUARTILI MISSING VALI		# OF SAMPLES MAXIMUM MAXIMUM ARITH. MEAN ARITH. STD. GEOM. MEAN 1ST CUARTILE 2ND CUARTILE 3ND CUARTILE 3ND CUARTILE MISSING VALI		# OF SAMPLE MAXIMUM MINIMUM ARITH. MEAN ARITH. STD. GEOM. MEAN 1ST QUARTILI 2ND QUARTILI 3RD QUARTILI MISSING VALL

ONTARIO MINISTRY OF ENVIRONMENT & ENERGY APIOS - ACIDIC, PRECIPITATION IN ONTARIO STUDY 1991 SUMMARY. STATISTICS OF CONCENTRATION

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	SODIUM UG/M3	13 0.6436 0.0874 0.1866 0.1440 0.1571 0.1283 0.1283	VANADIUM UG/M3	0.00013		
	POTASSIUM UG/M3	13 0.062 0.0062 0.0196 0.0176 0.0176 0.0168 0.020	NICKEL UG/M3	13 0.0005 0.0000 0.0000 0.5528 0.0000 0.0000		
	CHLORIDE UG/M3	13 0.277 0.095 0.095 0.049 0.153 0.189	COPPER UG/M3	0.0013 0.0003 0.0005 0.0005 0.0065 0.0066 0.0000	TOTAL NITRATE UG/M3	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
	CALCIUM UG/M3	13 0.188 0.163 0.303 0.143 0.049 0.071 0.114	MANGANESE UG/M3	0.0049 0.0049 0.0007 0.0015 0.0015 0.0016 0.0018	TOTAL SULFUR UG/M3	13 0.29 0.68 0.61 0.61 0.67 0.67
	NITRATE UG/M3	0.027 0.027 0.029 0.061 0.061 0.067	LEAD UG/M3	0.0042 0.0000 0.0017 0.0017 0.0012 0.0012 0.0012	SULFATE NYL UG/M3	13 0.6674 0.6674 0.4146 0.1256 0.3964 0.3201 0.4040
	NITRIC UG/M3	0.0922 0.0922 0.0209 0.0542 0.0506 0.0554 0.0654	MAGNESIUM UG/M3	0.1828 0.0121 0.0500 0.0500 0.0328 0.0201 0.0325	ARSENIC SU UG/M3	0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000
	SULFATE UG/M3	13 13 10.490 10.490 10.588 10.955 10.606 10.606	ALUMINIUM UG/M3	0.1402 0.0008 0.0038 0.0358 0.0117 0.0070 0.0103	CADMIUM UG/M3	13 0.00014 0.00000 0.00000 0.00000 0.00000 0.00013
OL SITE NO.1	SULFUR.DIOX UG/M3	13 1.606 0.000 0.591 0.463 0.744 0.295 0.295 0.868	IRON UG/M3	0.0867 0.0867 0.0000 0.0218 0.0667 0.0060 0.0099	ZINC UG/M3	0.0079 0.0006 0.0034 0.0028 0.0022 0.0034 0.0034
LOV	S					
STATION: DORION LOVOL SITE NO.1		# OF SAMPLES MAXIMUM MAINTHOUM ANTH. MEAN ANTH. STD. DEV. GEOM. MEAN 1ST OGNRILE 3ND QUARTILE 3ND QUARTILE 3ND GUARTILE 3ND GUARTILE		# OF SAMPLES MAXIMOM MINADOM ARTH. MEAN ARTH. STD. DEV. GEOW. MEAN 1ST QOARTILE 2ND QUARTILE 3ND QUARTILE 3ND QUARTILE MISSING VALUES		# OF SAMPLES MAZIMUM MINIMUM MINIMUM ARTH. WBAN ARTH. STD. DEV. GEOM. MEAN IST QUARTILE ZND QUARTILE ZND QUARTILE ZND QUARTILE ZND QUARTILE MISSING VALUES

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TANTON - DICKLE LAKE LOVOL STRE NO.1

STATION: PICKLE LAKE LOVOL SITE NO.1	LAKE LOVOL	SITE NO.1						
	SULFUR.DIOX UG/M3	OX SULFATE UG/M3	NITRIC UG/M3	NITRATE UG/M3	CALCIUM UG/M3	CHLORIDE UG/M3	POTASSIUM UG/M3	SODIUM UG/M3
# OF SAMPLES	3.061		0.2258	0.232	0.544	1.216	0.0298	0.6948
MINIMUM ARITH. MEAN	2.429	29 1.570	0.1220	0.134	0.229	0.545	0.0134	0.3672
ARITH. STD. DEV.	0.792		0.0739	0.070	0.223	0.475	0.0123	0.2318
15T ONARTIE	1.312		0.0601	0.074	0.059	0.177	0.0000	0.1949
2ND QUARTILE	2.914		0.0801	0.097	0.082	0.242	0.0105	0.2118
3RD QUARTILE	3.0	61 2,084	0.2258	0.232	0.544	1.216	0,0298	0.6948
	. al	MITINIMITATE NOGI	MILLSANDAM	TEAD	MANGANESE	COPPER	NICKEL	VANADIUM
	UG/M3		UG/M3	D	UG/M3	UG/M3	UG/M3	UG/M3
# OF SAMPLES					9	e	m	8
MAXIMUM	0.0424	24 0.0243	0.1158	0.0058	0.0035	0.0002	0.0000	0.0003
ARITH. MEAN	0.0141		0.0585		0.0019	0.0001	0.0000	0.0001
ARITH. STD. DEV.	: 0.02		0.0409		0.0011	0.0001	0.000	0.0002
GEOM. MEAN	0.34	0.0107	0.0462	0.0043	0.0016	0.0000	0.0000	0.0000
2ND QUARTILE	000000				0.0014	0.0000	00000.0	0.0000
3RD QUARTILE	0.04	24 0.0243	0.1158	0.0058	0.0035	0.0002	000000	0.0003
MISSING VALUES	••	0			>	5		5
	ZINC UG/M3	NC CADMIUM M3 UG/M3	ARSENIC S UG/M3	SULFATE NYL UG/M3	TOTAL SULFUR UG/M3	TOTAL NITRATE UG/M3	ra.	
# OF SAMPLES			0	0	m ;	m :		
MAXIMUM	0.0091	00 0.00000	0.0015	1.3606	1.35	0.15		
ARITH. MEAN	0.0030		0.0005	0.9627	1.74	0.26		
ARITH. STD. DEV.	. 0.0043	1 00000	0.0007	0.5431	12.0	0.14		
1ST QUARTILE	00.00		0.0000	0.5232	1.35	0.15		
2ND QUARTILE	0.0000		0.0000	1.0042	1.80	0.16		
3RD QUARTILE MISSING VALUES	00.0	0.00000 0	0.0015	1.3606	2.06	0.46		

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STATION: QUETICO CENTRE LOVOL SITE NO.1

SODIUM UG/M3	0.1616 0.1150 0.1150 0.1383 0.0233 0.1363 0.1150 0.1150 0.1150	VANADIUM UG/M3	000010001000000000000000000000000000000		
POTASSIUM UG/M3	2 0.0170 0.0142 0.0156 0.0156 0.0155 0.0142 0.0142	NICKEL UG/M3	0.0006 0.0004 0.0005 0.0005 0.0005 0.0006 0.0006		
CHLORIDE 1	0.193 0.142 0.142 0.166 0.166 0.142 0.167 0.193	COPPER UG/M3	000000000000000000000000000000000000000	TOTAL NITRATE UG/M3	0.27 0.23 0.24 0.24 0.27
CALCIUM UG/M3	0.0088 0.0066 0.0074 0.0074 0.0066	MANGANESE UG/M3	0.0014 0.0009 0.0009 0.0001 0.0011 0.0019 0.0019	TOTAL SULFUR UG/M3	1.22 0.38 0.38 0.38 0.38 1.22 0.38 0.66
NITRATE UG/M3	0 0 1 1 4 2 2 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	LEAD UG/M3	0.0023 0.0021 0.0021 0.0022 0.0022 0.0022 0.0023	SULFATE NYL UG/M3	1.4545 0.5093 0.9819 0.4726 0.8607 0.9819 1.4545
NITRIC UG/M3	0.1305 0.0641 0.0973 0.0973 0.0914 0.0641 0.0673 0.1305	MAGNESIUM UG/M3	0.0261 0.0168 0.01168 0.0014 0.0010 0.0209 0.0168 0.0214	ARSENIC SU	0.0007 0.0005 0.0005 0.0005 0.0005 0.0005 0.0007
SULFATE UG/M3	0.975 0.845 0.845 0.065 0.908 0.910 0.975	ALUMINIUM UG/M3	0.0107 0.0096 0.0096 0.0005 0.0101 0.0101 0.0101	CADMIUM UG/M3	0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000
SULFUR. DIOX UG/M3	2.661 1.229 1.945 0.716 1.229 1.229 1.229 2.661	IRON UG/M3	0.0172 0.0142 0.0142 0.0156 0.0155 0.0156 0.0156	ZINC UG/M3	0.0031 0.0022 0.0026 0.0026 0.0022 0.0022 0.0022
STATION: QUEITCO CENTRE LOVOL SITE NO.1 SULFUR.DIOX SULFA UG/M3 UG/M3	# OF SAMPLES MAXIMON ARTH ARTH SED GEOM. MEAN. 1ST QUARTILE SIND QUARTILE SIND QUARTILE MISSING VALUES		# OF SAMPLES MAXTWOM MINUTHON ARTH. WEAN ARTH. STD. DEV. GEOM. WEAN IST QUARTLE 3RD QUARTLE 3RD QUARTLE 3RD QUARTLE 3RD QUARTLE MISSING VALUES		# OF SAMPLES MAXIMOM MINUMUM ARITH. MEAN ARITH. STD. DEV. GEOW. MEAN 1ST QUARTILE STD QUARTILE STD QUARTILE STD QUARTILE STD QUARTILE MISSING VALUES:

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STATION: E.L.A. LOVOL SITE NO.1

0.12 0.10 0.10 0.10
0.12 0.12 0.11 0.11
000000000000000000000000000000000000000
0.2846 0.1803 0.2444 0.1645 0.2362 0.3171
0.0001 0.0001 0.0000 0.0000 0.0000
0.00003 0.10460 0.00000 0.00000 0.00000
0,0043 0,0068 0,0010 0,0010 0,0025 0,0031
ARITH. MEAN ARITH. STD. DEV. GEOM. MEAN STST QUARTILE SND QUARTILE SRD QUARTILE MISSING VALUES

ONTARIO MINISTRY OF ENVIRONMENT & ENERGY
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1991 SUMMARY STATISTICS OF CONCENTRATION

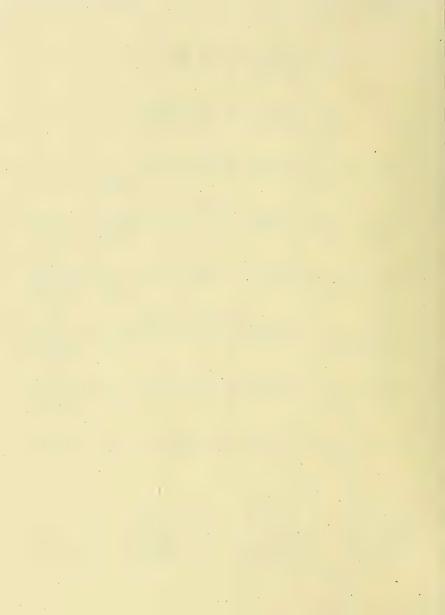
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SODIUM UG/M3	13 1.3140 0.0771 0.2543 0.3189 0.1730 0.1511 0.2231	VANADIUM UG/M3	0.00014 0.00000 0.00000 0.00000 0.00000 0.00000		
POTASSIUM UG/M3	13 0.1699 0.0121 0.0425 0.0300 0.0176 0.0267 0.0399	NICKEL UG/M3	13 0.0016 0.0000 0.0000 0.3479 0.0000 0.0000		
CHLORIDE UG/M3	13 1.558 0.317 0.371 0.228 0.138 0.138	COPPER UG/M3	0.000113	TOTAL NITRATE UG/M3	138 0.24 0.24 0.34 0.15 0.15 0.20
CALCIUM UG/M3	13 0.000 0.000 0.388 0.348 0.357 0.350 0.454	MANGANESE UG/M3	0.0054 0.0006 0.0006 0.0015 0.0013 0.0035	TOTAL SULFUR UG/M3	1357
NITRATE UG/M3	13 0.813 0.032 0.197 0.098 0.099 0.127 0.127	. LEAD UG/M3	13 0.0008 0.0008 0.0003 0.0023 0.0015 0.0015	LEATE NYL UG/M3	13,3490 0,0000 1,0404 1,8450 0,6318 0,5979 0,7489
NITRIC UG/M3	13 0.5690 0.0914 0.1408 0.0769 0.0440 0.0440	MAGNESIUM. UG/M3	13 0.2671 0.0202 0.0202 0.0729 0.0690 0.0383 0.0383	ARSENIC SU UG/M3	13 0.0001 0.0000 0.0000 0.0000 0.0000 0.0000
SULFATE UG/M3	13 7.789 0.478 1.811 1.811 1.360 0.835 1.703 1.901	ALUMINIUM UG/M3	13 0.1908 0.0023 0.0315 0.0150 0.0150 0.0081 0.0130 0.0236	CADMIUM UG/M3	13 0.00023 0.00000 0.00000 0.00000 0.00012 0.00112 0.00113
SULFUR.DIOX UG/M3	# OF SAMPLES 13.291 MINIMUM 0.000 MINIMUM 0.000 1.010 ARTH MENN 1.412 ARTH STD. DEV. 3.422 COOK, MENN 0.870 CLST QUARTLE 0.257 ZND QUARTLE 0.610 MISSING VALUES 1.754 MISSING VALUES 1.754	IRON UG/M3	# OF SAMPLES 133 MINIMUM 0.1399 MINIMUM 0.0000 MINIMUM 0.0031 ARITH MENN 0.0331 ARITH STD. EV. 0.0385 1ST GUARTILE 0.0000 ZND GUARTILE 0.0102 MISSING VALUES 0.0421 MISSING VALUES 0.0421	ZINC	# OF SAMPLES . 0.0163 MINIMUM . 0.00163 MINIMUM . 0.00054 ARITH . MEN 0.0054 ARITH . STD 0.0049 IST QUARTILE . 0.0035 ARI . 0.0035
	SULFATE NITRIC NITRATE CALCIUM CHLORIDE POTASSIUM UG/M3 UG/M3 UG/M3 UG/M3 UG/M3 UG/M3	SULFUR.DIOX SULFATE NITRIC NITRATE CALCIUM CHLORIDE POTASSIUM UG/M3 UG/M3	SULFUR.DIOX SULFATE NITRATE CALCIUM CHLORIDE POTASSIUM UG/M3 U	SULFUR.DIOX SULFATE NITRIC NITRATE CALCIUM CHOORIDE POPASSIUM SULFATE UG/M3 UG/M3	PLES SULFUR.DIOX SULFATE NITRATE NITRATE CALCIUM CHIORIDE POTASSIUM SULFATE UG/M3 UG/M3

ONTARIO MINISTRY OF ENVIRONMENT & ENERGY APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY 1991 SUMMARY STATISTICS OF CONCENTRATION

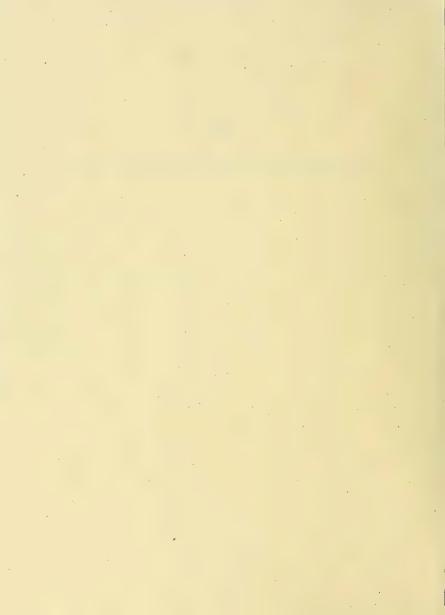
STATION: WOLF RIDGE LOVOL SITE NO.1

SS : 3 691 2 67/83 0G/M3
SS : 3.691 2.675 0.6783 0.05/M3 0G/M3 0G/M
SS : 05/M3 UG/M3 U
SS : UGA : DEV : LE :
OF SAMPLE MAXIMUM MINIMUM ARITH. MEA ARITH. STD. SECH. MEAN SECH. MEAN MESTING VARIEN



PART IV

SUMMARY STATISTICS OF OBSERVED CONCENTRATION BY REGION



ONTARIO MINISTRY OF ENVIRONMENT & ENERGY APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY 1991 SUMMARY STATISTICS OF CONCENTRATION

		*				
	SODIUM UG/M3	55 0.9124 0.0544 0.1845 0.1845 0.1701 0.1993 0.2605	VANADIUM UG/M3	55 0.00000 0.00000 0.00000 0.00000 0.00000		
	POTASSIUM UG/M3	17.0053 0.0104 0.3636 2.2658 0.0445 0.0352 0.0614	NICKEL UG/M3	0.0036 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000		
	CHLORIDE UG/M3	1.807 0.332 0.332 0.332 0.135 0.135 0.373	COPPER UG/M3	55 0.0000 0.00000 0.00000 0.00010 0.00110 0.00110	TOTAL NITRATE UG/M3	00.00 00.00 00.00 00.00 00.00 00.00 00.00
	CALCIUM UG/M3	55 1.134 0.000 0.320 0.278 0.129 0.129 0.655	MANGANESE UG/M3	0.0055 0.0056 0.0056 0.0045 0.0042 0.0042	TOTAL SULFUR UG/M3	12.53 0.46 0.23 0.23 0.23 0.24 0.44
	NITRATE UG/M3	55 0.17 0.437 0.289 0.165 0.638	LEAD UG/M3	0.0867 0.0000 0.00107 0.01109 0.0055 0.0026 0.0026	SULFATE NYL UG/M3	2.4228 : 0.3035 0.3035 0.3035 0.3035 0.3035 0.3035 0.3035 0.3035 0.5655 0.5555 0.5655 0.5655 0.5555 0.5555 0.5555 0.5555 0.5555 0.5555 0.5555 0.5555
	NITRIC UG/M3	55 0.3798 0.0399 0.0754 0.1223 0.0879 0.1141	MAGNESIUM UG/M3	55 0.3267 0.000 0.0057 0.0542 0.0642 0.0642 0.0584	ARSENIC SU UG/M3	0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000
	SULFATE UG/M3	6.882 0.755 0.755 0.744 1.434 1.612 1.612 3.660 0.300	ALUMINIUM UG/M3	55 0.7773 0.0014 0.01163 0.0299 0.0290 0.0290	CADMIUM UG/M3	55 0.00162 0.00000 0.00005 0.00030 0.00126 0.00010 0.00021
	SULFUR.DIOX UG/M3	22.489 0.000 4.624 4.337 3.160 1.718 3.649 6.750	IRON.	2.4124 0.1030 0.1030 0.3213 0.0849 0.0159 0.0159	ZINC UG/M3	55 0.0561 0.0008 0.0136 0.0136 0.0087 0.0043 0.0273
REGION: CE		# OF SAMPLES MAXIMUM MINIMUM MARATH, MEAN ARTH, STD. DEV. GEOW. MEAN IST CORRTILE ZND CORRTILE ZND CORRTILE MISSING VALUES		# OF SAMPLES MAXIMUM MINIMUM MARTH. MEAN ARTH. STD. DEV. GEOM. MEAN IST QUARTLIE ZND QUARTLIE ZND QUARTLIE ZND GUARTLIE ZND GARTLIE MISSING VALUES		# OF SAMPLES MAXIMUM MINIMUM MINIMUM MARTH: MEAN ARTH: STD. DEV. GEOM. MEAN IST CORRTILE ZND CURRTILE ZND CURRTILE ZND CURRTILE MISSING VALUES

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REGION: NE									
	(C)	SULFUR.DIOX UG/M3	SULFATE UG/M3	NITRIC UG/M3	NITRATE UG/M3	CALCIUM UG/M3	CHLORIDE UG/M3	POTASSIUM UG/M3	SODIUM UG/M3
# OF SAMPLES MAXIMUM ARITH. MEAN ARITH. STD. DEV. ESCOM. MEAN IST QUARTILE SND QUARTILE SND QUARTILE SND QUARTILE SND QUARTILE SND QUARTILE MISSING VALUES		25.070 0.000 5.900 5.473 1.745 1.785 8.270	100 6,976 0,000 2,199 1,198 1,947 1,957 1,957 2,575	100 0.2859 0.0000 0.0142 0.0496 0.1058 0.1826 0.1137 0.1518	100 0.450 0.012 0.0163 0.090 0.137 0.152 0.218	14.430 0.000 0.330 0.471 0.160 0.125 0.125	100 0.061 0.061 0.285 0.286 0.118 0.118 0.255	0.1039 0.1039 0.0038 0.0176 0.0176 0.0273 0.0357	1.4044 0.0430 0.1792 0.1955 0.1955 0.1988 0.1128
		IRON UG/M3	ALUMINIUM UG/M3	MAGNESIUM UG/M3	I LEAD UG/M3	MANGANESE UG/M3	COPPER UG/M3	NICKEL . UG/M3	VANADIUM UG/M3
# OF SAMPLES MAINIMM MAINIMM MAITH. MEAN RAITH. STD. DEV. ESDW. MEAN IST QUARTILE SNB QUARTILE SNB QUARTILE SNB QUARTILE SNB QUARTILE MISSING VALUES		13.4532 0.0000 0.0000 0.2421 1.3917 0.1028 0.0143 0.0977	3.7000 0.0002 0.0867 0.3820 0.0218 0.0204	2.4790 0.0000 0.0000 0.02580 0.02600 0.0321 0.0481	100 0.3293 0.0000 0.0118 0.0056 0.0056 0.0026	100 0.2220 0.2220 0.0064 0.00269 0.0026 0.0015	100 0.4455 0.0000 0.0100 0.00114 0.0044 0.0015 0.0026 0.0026	000000000000000000000000000000000000000	0.0000000000000000000000000000000000000
		ZINC UG/M3	CADMIUM UG/M3	ARSENIC S UG/M3	SULFATE NYL UG/M3	TOTAL SULFUR UG/M3	TOTAL NITRATE UG/M3		
# OF SAMPLES AAXINUM AINIMUM AINIMUM RAITH. STD. DEV. ESDM. MEAN IST QUARTILE RND QUARTILE RND QUARTILE RND QUARTILE RND QUARTILE RND QUARTILE RND QUARTILE		100 0.5180 0.0003 0.0055 0.0064 0.0062 0.0062	100 0.02571 0.00000 0.00005 0.00319 0.00202 0.00024 0.00024	100 0.0851 0.0000 0.0025 0.0107 0.0034 0.0003	2.6887 0.0616 1.0835 0.4116 0.9992 0.8412 1.0945	100 10.19 0.03 3.69 2.88 2.88 1.145 5.13	100 0.74 0.01 0.13 0.13 0.24 0.37 0.37		

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	SODIUM UG/M3	1.3140 0.0115 0.01947 0.2137 0.0908 0.1313 0.1860	VANADIUM · UG/M3	0.00014 0.00010 0.00000 0.00000 0.00000 0.00000		
	POTASSIUM UG/M3	0.1699 0.0000 0.00242 0.0221 0.0105 0.0168	NICKEL UG/M3	0.0016 0.0016 0.0001 0.0003 0.3552 0.0000 0.0000		
	CHLORIDE UG/M3	1.558 0.055 0.233 0.264 0.183 0.1126 0.208	COPPER UG/M3	0.0051 0.0050 0.0000 0.0008 0.0118 0.0000 0.0008	TOTAL NITRATE UG/M3	1,38 0,138 0,177 0,20 0,14 0,18 0,18
	CALCIUM UG/M3	44 1.399 0.200 0.200 0.289 0.056 0.056 0.058	MANGANESE UG/M3	0.0054 0.0050 0.0020 0.0014 0.0019 0.0019 0.0027	TOTAL SULFUR UG/M3	24 44 24 24 24 24 24 24 24 24 24 24 24 2
	NITRATE UG/M3	44 0.813 0.027 0.106 0.117 0.053 0.079 0.115	LEAD UG/M3	0.0190 0.0000 0.0000 0.0023 0.0023 0.0012 0.0012	SULFATE NYL UG/M3	7.3490 0.0000 0.6242 1.0724 0.4318 0.2450 0.5258
	NITRIC UG/M3	0.5690 0.0681 0.0681 0.0843 0.0572 0.0512 0.0512	MAGNESIUM UG/M3	44 0.2671 0.0050 0.0543 0.0573 0.0573 0.0201 0.0292 0.0736	ARSENIC SU UG/M3	0.0001 0.0001 0.0003 0.0000 0.0000 0.0000
	SULFATE UG/M3	7.789 0.000 1.200 1.164 0.973 0.587 0.901 1.673	ALUMINIUM UG/M3	44 0.1908 0.0004 0.0349 0.0349 0.0113 0.0065 0.0207	CADMIUM UG/M3	0:00023 0:00002 0:00000 0:00007 0:02910 0:00000 0:00000
	SULFUR.DIOX UG/M3	13, 291 0.000 1.109 2.044 0.855 0.855 1.134	IRON UG/M3	44 0.1399 0.0000 0.0230 0.0230 0.0830 0.0000 0.0165 0.0312	ZINC UG/M3	44 0.0260 0.0000 0.0042 0.0055 0.0055 0.0016 0.0043
REGION: NW		# OF SAMPLES MAXIMUM MINIMUM ARITH. STD. DEV GEOM. MEAN 1ST QUARTILE ZND QUARTILE ZND QUARTILE ZND QUARTILE ZND QUARTILE MISSING VALUES		# OF SAMPLES MAXINUM MINIMUM ARITH. STD. DEV GEOM. MEAN 1ST QUARTILE ZND QUARTILE ZND QUARTILE ZND QUARTILE ZND QUARTILE MISSING VALUES		# OF.SAMPLES MAXINUM MINIMUM ARITH. WEAN ARITH. STD. DEV GEOM. MEAN 1ST QUARTILE ZND QUARTILE ZND QUARTILE ZND QUARTILE SND QUARTILE WISSING VALUES

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1991 SUMMARY STATISTICS OF CONCENTRATION

	SODIUM UG/M3	25 1.0466 0.0744 0.1937 0.1589 0.1508 0.1508	VANADIUM UG/M3	25 0.0020 0.0020 0.0000 0.00012 0.0012 0.0012 3		
	.POTASSIUM UG/M3	25 0.0260 0.0260 0.0264 0.0585 0.0585 0.0585 0.05819	NICKEL UG/M3	000000000000000000000000000000000000000		
	CHLORIDE	25 1.446 0.130 0.321 0.257 0.278 0.278 0.256	COPPER UG/M3	25 0.0104 0.0000 0.0021 0.0030 0.0038 0.0018	TOTAL NITRATE UG/M3	25 1.05 0.16 0.26 0.57 0.57 0.62 3
	CALCIUM UG/M3	25 0.0813 0.364 0.364 0.369 0.343 0.343 0.343	MANGANESE UG/M3	25 0.0103 0.0000 0.0021 0.0021 0.0033 0.0030	TOTAL SULFUR UG/M3	3 2 2 2 1 1 6 5 1 1 2 5 2 5 2 1 1 2 1 1 1 1 1 1 1 1 1
	NITRATE UG/M3	0.791 0.114 0.114 0.393 0.393 0.444 0.444 0.595	LEAD UG/M3	25 0.0000 0.0000 0.0058 0.0058 0.0058 0.0058 0.0058	SULFATE NYL UG/M3	25.5800 0.6204 1.3221 0.5231 0.8337 1.2231 1.2410 1.2410
	NITRIC UG/M3	25 0.3127 0.0475 0.1923 0.1720 0.1218 0.1989 0.2842	MAGNESIUM UG/M3	25 0.2844 0.0000 0.0000 0.0609 0.0758 0.0741 0.0593	ARSENIC SU UG/M3	25 0.0011 0.0000 0.00005 0.00003 0.0005 0.0005 3
	SULFATE UG/M3	25 1,342 3,552 1,471 1,471 2,445 3,303 4,668	ALUMINIUM UG/M3	25 0.0948 0.0022 0.0310 0.0215 0.0245 0.0197 0.0197	CADMIUM UG/M3	25 0.00036 0.00000 0.00016 0.00017 0.00012 0.00014 0.00014
	SULFUR.DIOX UG/M3	25 0.105 0.732 3.951 2.079 3.447 2.587 4.412	IRON UG/M3	25 0.1182 0.0000 0.0344 0.0584 0.0684 0.0338 0.0338 0.0885	ZINC UG/M3	25 0.0178 0.0000 0.0093 0.0113 0.0013 0.0073 0.0106
REGION: SE		# OF SAMPLES MAXIMUM MINIMUM ARITH. MEAN ARITH. STD. DEV. GEOM. MEAN 1ST QUARTILE ZND QUARTILE SND QUARTILE MISSING VALUES		# OF SAMPLES MAXINUM MINIOUM ARITH. STD. ARITH. STD. GEOM MEAN 1ST QUARTILE ZND QUARTILE ZND QUARTILE AND STD. MISSING VALUES		# OF SAMPLES MAXIMUM MINIMUM ARITH. WEAN ARITH. STD. DEV. GEOW. MEAN 1ST QUARTILE 2ND QUARTILE 3ND QUARTILE 3ND QUARTILE MISSING VALUES

SODIUM UG/M3

POTASSIUM UG/M3

1.6504 0.0773 0.2128 0.2304 0.1676 0.1091 0.1352

21.6311 0.0187 0.6047 0.0578 0.0369 0.0437 0.0630

ONTARIO MINISTRY OF ENVIRONMENT & ENERGY APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY 1991 SUMMARY STATISTICS OF CONCENTRATION

	CHLORIDE (M3 UG/M3	56 0.050 0.047 0.247 0.249 0.241 0.318 0.318 0.318 0.318 0.318 0.318 0.348 0.351 0.351 0.358	MANGANESE COPPER UG/M3 UG/M3	56 0.0120 0.0003 0.0004 0.00025 0.00025 0.00034 0.00034 0.00034 0.00034 0.00036 0.00036 0.00036 0.00036 0.00036	TOTAL TOTAL SULFUR NITRATE UG/M3	11.25 0.1.25 0.1.25 0.01 0.01 0.03 0
	NITRATE CALCIUM UG/M3 UG/M3	1.000 0.000	LEAD MAN UG/M3 U	0.0012 0.0012 0.0003 0.0035 0.0054 0.0059 0.0079	SULFATE NYL SUL UG/M3 UG	56 0.1424 1.1709 0.7374 0.7374 0.8189 1.0412 1.2857
	NITRIC UG/M3	56 0.5513 0.0000 0.2111 0.1028 0.1028 0.1994 0.1918 0.256	MAGNESIUM UG/M3	56 0.0175 0.00961 0.0427 0.0687 0.0687 0.0687	ARSENIC SUL	0.000000 0.000000000000000000000000000
	SULFATE UG/M3	13.891 0.13.891 0.13.83 2.320 2.794 2.358 3.397 4.627	ALUMINIUM UG/M3	56 0.01945 0.00173 0.00173 0.0193 0.0193 0.0526	CADMIUM UG/M3	0.000122 0.00031 0.00023 0.00023 0.00015 0.00016
	SULFUR.DIOX UG/M3	19.856 10.000 7.274 4.487 5.780 6.813 8.8813	IRON UG/M3	2.56 0.02010 0.00031 0.0618 0.0191 0.0191	ZINC UG/M3	56 0.0287 0.0086 0.01066 0.01096 0.01096 0.01096
REGION: SW		# OF SAMPLES MAXIMUM MINIMUM ARITH MEAN ARITH. STD. DEV. GEOW. MEAN 1ST COMRTILE 2ND COMRTILE 3ND COMRTILE 3RD COMRTILE 3RD COMRTILE 3RD COMRTILE 3RD COMRTILE		# OF SAMPLES MAXIMUM MINIMUM ARITH. MEAN ARITH. STD. DEV. GEOOL. MEAN 1ST OUARTLE 3MD CUARTLE 3MD CUARTLE 3MD CUARTLE MISSING VALUES		# OF SAMPLES MAXIMUM MINIMUM ARITH MEAN ARITH. STD. DEV. GEOV. MEAN 1ST CUARTILE 3RD CUARTILE 3RD CUARTILE 3RD CUARTILE MISSING VALUES

VANADIUM

UG/M3

NICKEL UG/M3

ONTARIO MINISTRY OF ENVIRONMENT & ENERGY APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY . 1991 SUMMARY STATISTICS OF CONCENTRATION

	SODIUM UG/M3	0.3767 0.0760 0.0760 0.0836 0.1485 0.15891 0.15891 0.1868	VANADIUM UG/M3	000000000000000000000000000000000000000		
	POTASSIUM UG/M3	0.0431 0.0126 0.0126 0.0087 0.0259 0.0263 0.0337 0.0337	NICKEL UG/M3	0.000000000000000000000000000000000000		
	CHLORIDE UG/M3	0.158 0.108 0.108 0.042 0.154 0.127 0.194	COPPER UG/M3	0.0038 0.0030 0.0012 0.0012 0.0072 0.0005 0.0014	TOTAL NITRATE UG/M3	0.050 0.050 0.025 0.12 0.13 0.27 0.33
	CALCIUM UG/M3	13 0.352 0.000 0.152 0.081 0.175 0.116 0.140	MANGANESE UG/M3	0.0133 0.0012 0.0013 0.0033 0.0034 0.0047 0.0047	TOTAL SULFUR UG/M3	0,252 0,46 10,146 10,705 11,23 0,100 0,100
	NITRATE UG/M3	0.334 0.334 0.018 0.164 0.128 0.128 0.238	LEAD UG/M3	0.0047 0.0000 0.00012 0.0013 0.0013 0.0023 0.0023	SULFATE NYL UG/M3	0.3035 0.3035 0.3035 0.5281 0.5281 0.5426 0.5426
	NITRIC UG/M3	13 0.1616 0.0399 0.0827 0.027 0.0679 0.0679 0.09334 0.0993	MAGNESIUM UG/M3	0.2062 0.0237 0.0237 0.0514 0.0609 0.0609 0.0512	ARSENIC SU UG/M3	0.0015 0.0002 0.0003 0.0005 0.0005 0.0005
	SULFATE UG/M3	2.675 0.755 0.755 0.559 1.391 1.110 1.510 0.00	ALUMINIUM UG/M3	13 0.3366 0.0079 0.00793 0.0439 0.0191 0.01742	CADMIUM UG/M3	13 0.00037 0.00010 0.00011 0.00011 0.00012 0.00012
	SULFUR.DIOX UG/M3	13 691 0 000 1.316 0 951 1 161 1 107 1 107 1 107	IRON UG/M3	13 0.3761 0.0000 0.1023 0.1126 0.0282 0.0703 0.1124	ZINC UG/M3	0.0167 0.0019 0.0067 0.0049 0.0030 0.0030
REGION: Z		# OF SAMPLES MAXINUM MINIMUM ARITH. MEAN ARITH. STD DEV. GEOM NEAN 1ST ORATHLE NEO COMMITTE NEO		# OF SAMPLES BAXITUM MINIMUM ARITH. MEAN ARITH. STD GEOM. WEAN 19T OMARTILE ZND COMARTILE ZND COMARTILE SND COMARTILE SND COMARTILE SND COMARTILE SND COMARTILE NISSING VALUES HISSING VALUES		# OF SAMPLES MAXINUM MINIMUM ARITH MEAN ARITH STD. DEV. GEOM. WERNI IST QUARTILE 3DO QUARTILE MISSING VALUES



